

89 366 2.8 1449 15 US-10-402-072A-8 Sequence 8, Appli
90 365 2.8 960 12 US-10-342-331-5 Sequence 5, Appli
91 364 2.8 1426 12 US-10-664-859-15 Sequence 15, Appli
92 364 2.8 1426 12 US-09-915-543-15 Sequence 15, Appli
93 364 2.8 1426 14 US-10-322-579-15 Sequence 15, Appli
94 358 2.7 1618 9 US-09-963-875-1 Sequence 1, Appli
95 358 2.7 1618 12 US-09-731-255-2 Sequence 2, Appli
96 358 2.7 1618 14 US-10-136-891-2 Sequence 1, Appli
97 358 2.7 1618 14 US-10-120-687-1 Sequence 1, Appli
98 355 2.7 2093 14 US-10-032-585-7665 Sequence 7665, Ap
99 354 2.7 3507 15 US-10-369-493-5784 Sequence 5784, Ap
100 351 2.7 1341 14 US-10-058-124-18 Sequence 18, Appli

ALIGNMENTS

RESULT 1
US-10-087-192-654
; Sequence 654, Application US/10087192
; Publication No. US20020182586A1
; GENERAL INFORMATION:
; APPLICANT: Morris, David W.
; APPLICANT: Engelhard, Eric K.
; TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR
; FILE OF INVENTION: CANCER
; FILE REFERENCE: 529452000122
; CURRENT APPLICATION NUMBER: US/10/087,192
; CURRENT FILING DATE: 2002-03-01
; PRIOR APPLICATION NUMBER: US 09/747,377
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: US 09/798,586
; PRIOR FILING DATE: 2001-03-02
; NUMBER OF SEQ ID NOS: 2059
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 654
; LENGTH: 2517
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-087-192-654

Query Match 99.5%; Score 13145; DB 12; Length 2517;
Best Local Similarity 99.5%; Pred. No. 0;
Matches 2505; Conservative 1; Mismatches 11; Indels 0; Gaps 0;
QY 1 MSGSTQVACTWATPRYPHSLSYVQIARTHTDVGLEYQHHSRDYASHLSPGSIQ 60
DB 1 MSGSTQVACTWATPRYPHSLSYVQIARTHTDVGLEYQHHSRDYASHLSPGSIQ 60
QY 61 PQRPRPSSLLSEFQPGNERSQELHLPESHSHYLPGLCKSEMFEIESKRPRLLELPDPLLRP 120
DB 61 PQRPRPSSLLSEFQPGNERSQELHLPESHSHYLPGLCKSEMFEIESKRPRLLELPDPLLRP 120
QY 121 SPILLATQAPAGSDLTNDRSLTKLSPVSPSPHTDPELELPPRLSKEELIQNMDRVD 180
DB 121 SPILLATQAPAGSDLTNDRSLTKLSPVSPSPHTDPELELPPRLSKEELIQNMDRVD 180
QY 181 REITWVEQQISLKKKQQQLLEEAAPPEPEKPVSPPIESKRSRVQIYDENRKAEA 240
DB 181 REITWVEQQISLKKKQQQLLEEAAPPEPEKPVSPPIESKRSRVQIYDENRKAEA 240
QY 241 AHRILEGLGQVELPLYNQSDTRQYHENIKINQAMRKKLILYFKRNHARKQWKQFCQ 300
DB 241 AHRILEGLGQVELPLYNQSDTRQYHENIKINQAMRKKLILYFKRNHARKQWKQFCQ 300
QY 301 RYDQLEALEKKVIERINPRRAKSKVREYVEKQFPEIRKOREIQERMQSRVGQSG 360
DB 301 RYDQLEALEKKVIERINPRRAKSKVREYVEKQFPEIRKOREIQERMQSRVGQSG 360
QY 361 LMSAARSEHEVSEIIDLSEQENLEKQMLAVIPPMYLDADQQRKFINNGLMADPM 420
DB 361 LMSAARSEHEVSEIIDLSEQENLEKQMLAVIPPMYLDADQQRKFINNGLMADPM 420

QY 421 KYVKDRQVNMNMSQEKETFREKFMQHPKQKQFGLIASFLERKTVABECVLVYIYTKKNENYK 480
DB 421 KYVKDRQVNMNMSQEKETFREKFMQHPKQKQFGLIASFLERKTVABECVLVYIYTKKNENYK 480
QY 481 SLVRSYRRRGSKSQQQ 540
DB 481 SLVRSYRRRGSKSQQQ 540
QY 541 DKEDLLKKTDDTDSGDNDKEAVASKGRKTANSQGRKGRITRSMANSEAEITPQQ 600
DB 541 DKEDLLKKTDDTDSGDNDKEAVASKGRKTANSQGRKGRITRSMANSEAEITPQQ 600
QY 601 SAEALSMELNESSRWTEEMETAKKGLLEHGRNWSAIAARMVGSKTQVSCNKFYFNKKRQ 660
DB 601 SAEALSMELNESSRWTEEMETAKKGLLEHGRNWSAIAARMVGSKTQVSCNKFYFNKKRQ 660
QY 661 NLDEILQHKLQKVEKERNARRKKKAPAAASEAAFPVVEDEEMEAASGVSGNEEMVEE 720
DB 661 NLDEILQHKLQKVEKERNARRKKKAPAAASEAAFPVVEDEEMEAASGVSGNEEMVEE 720
QY 721 AEALHASGNEVPRGECGSPATVNNSSDYESIPSPHTEAAKDTQNGPKPPATILGADGPPP 780
DB 721 AEALHASGNEVPRGECGSPATVNNSSDYESIPSPHTEAAKDTQNGPKPPATILGADGPPP 780
QY 781 GPPTPRRTSRAPIEFTPASEATGATPPPPAPPSAPPPVPPVPPVPPVPPVPPVPPVPPV 840
DB 781 GPPTPRRTSRAPIEFTPASEATGATPPPPAPPSAPPPVPPVPPVPPVPPVPPVPPVPPV 840
QY 841 EQKPPAAELAVDTGKAEPEYKSECTEAEAGPKAGKDAEAAEATAEALKAKEKGS 900
DB 841 EQKPPAAELAVDTGKAEPEYKSECTEAEAGPKAGKDAEAAEATAEALKAKEKGS 900
QY 901 GRATTAKSGCAPQDSDSATCSADEVDEAEAGDKNRLSPRPSLLTPTGDPANASPOXP 960
DB 901 GRATTAKSGCAPQDSDSATCSADEVDEAEAGDKNRLSPRPSLLTPTGDPANASPOXP 960
QY 961 LDLKOLKORAAAIPPIQVTKVHEPPREDAAFTKPPAPPAPPONQLOPESDAPQPGSSPR 1020
DB 961 LDLKOLKORAAAIPPIQVTKVHEPPREDAAFTKPPAPPAPPONQLOPESDAPQPGSSPR 1020
QY 1021 GKSRSAPPADKEAFAAAEQKLPDPPCWTSGLPVPPVPPREVIKASPHADPSAFYAPP 1080
DB 1021 GKSRSAPPADKEAFAAAEQKLPDPPCWTSGLPVPPVPPREVIKASPHADPSAFYAPP 1080
QY 1081 GHPLPLGLHDTARPVLPRPPTISNPPPLISSAKHPSVLERQICAISSQMSVQLHVPYSEH 1140
DB 1081 GHPLPLGLHDTARPVLPRPPTISNPPPLISSAKHPSVLERQICAISSQMSVQLHVPYSEH 1140
QY 1141 AKAPVGPVTMGLPLPMDPKLAPFSGVKOEQLSPRGQAGFPESLGVPTAQEASVLRGTAL 1200
DB 1141 AKAPVGPVTMGLPLPMDPKLAPFSGVKOEQLSPRGQAGFPESLGVPTAQEASVLRGTAL 1200
QY 1201 GSVPGGSIITKGIPTSTVPDSAITVRGSIITHTGTPADVLYKGTITRIIGEDSPSLDRGRE 1260
DB 1201 GSVPGGSIITKGIPTSTVPDSAITVRGSIITHTGTPADVLYKGTITRIIGEDSPSLDRGRE 1260
QY 1261 DSIPLKGHVIEYEGKGHVLSYEGGMSVTQCSKEDGRSSSGPPHETAAPKRTYDMMEGRVGR 1320
DB 1261 DSIPLKGHVIEYEGKGHVLSYEGGMSVTQCSKEDGRSSSGPPHETAAPKRTYDMMEGRVGR 1320
QY 1321 AISSASIEGLMGRAIPPERHSPHLLKEQHHRGSIITQGIIPRSVVEAQEDYLREAKLLKR 1380
DB 1321 AISSASIEGLMGRAIPPERHSPHLLKEQHHRGSIITQGIIPRSVVEAQEDYLREAKLLKR 1380
QY 1381 EGTTPPPPSRDLTEAYKTOALGPLKPAHEGLVATVKEAGRSIHEIPREELRHTPELP 1440
DB 1381 EGTTPPPPSRDLTEAYKTOALGPLKPAHEGLVATVKEAGRSIHEIPREELRHTPELP 1440
QY 1441 LAPRPLKEGSIITQGTPLKYDTGASTGSKKHVRSILIGSPGRTFFPVPHLDVMADARALE 1500
DB 1441 LAPRPLKEGSIITQGTPLKYDTGASTGSKKHVRSILIGSPGRTFFPVPHLDVMADARALE 1500
QY 1501 RACYEESLSRPGTASSSGSGSTARGAPVIVPELKGKRSQPLTYEDHGAFAGHLPRGSPV 1560

Db 1501 RACVBSLKRPGTASSGSGSIARGAIVVPELGKPSQSLTYEDGAPFAGHLPGRSPV 1560
Qy 1561 TREPTPRLOEGSLSSKASQDRKLTSTPREIAKSPHSTVPEHHPHIPISPYEHLIRGVSG 1620
Db 1561 TREPTPRLOEGSLSSKASQDRKLTSTPREIAKSPHSTVPEHHPHIPISPYEHLIRGVSG 1620
Qy 1621 VDIYRSHIPAFDPTSIPIRGIPIDAAAAYLPHRLAPNTPYHLPPYLIRGYPDTAALE 1680
Db 1621 VDIYRSHIPAFDPTSIPIRGIPIDAAAAYLPHRLAPNTPYHLPPYLIRGYPDTAALE 1680
Qy 1681 NROTIINDYITSOOMHNTATMAORADMLRGLSPRESSIALNYAAGPRGIIDLQVPHL 1740
Db 1681 NROTIINDYITSOOMHNTATMAORADMLRGLSPRESSIALNYAAGPRGIIDLQVPHL 1740
Qy 1741 PVLVPPPTGTPATAMDRLAYLTPAQPFSSRHSSPLSPGCPHTLTKPTTTSSEERDR 1800
Db 1741 PVLVPPPTGTPATAMDRLAYLTPAQPFSSRHSSPLSPGCPHTLTKPTTTSSEERDR 1800
Qy 1801 DRERDREREKSILSTTTVEHAPITWRPCTEQSSGSSGGGGSSSRPASHSHAHQH 1860
Db 1801 DRERDREREKSILSTTTVEHAPITWRPCTEQSSGSSGGGGSSSRPASHSHAHQH 1860
Qy 1861 SPISPRITQDALQORPSPVILHNTGKGIITAVEPSKPTVLRSTSSSPVRPAATPPATHCP 1920
Db 1861 SPISPRITQDALQORPSPVILHNTGKGIITAVEPSKPTVLRSTSSSPVRPAATPPATHCP 1920
Qy 1921 LGTGLDGVYPTLMPEVLLPKPAEPVAPRPRADTGHAFKAPKARGLEPASPSSKGS 1980
Db 1921 LGTGLDGVYPTLMPEVLLPKPAEPVAPRPRADTGHAFKAPKARGLEPASPSSKGS 1980
Qy 1981 PRELVPVSGHATIAKTNALPHASPDPPAPPASADPHREKTSQKPFSTQLELRS 2040
Db 1981 PRELVPVSGHATIAKTNALPHASPDPPAPPASADPHREKTSQKPFSTQLELRS 2040
Qy 2041 LGHSGSYSPGVEPVPSPSSSLTHDKGLPKHLELDKSHLGEURPKPGPVKLGGEA 2100
Db 2041 LGHSGSYSPGVEPVPSPSSSLTHDKGLPKHLELDKSHLGEURPKPGPVKLGGEA 2100
Qy 2101 AHLPHLRPLPESQSSPPLQTAGVKGHORVVTLAQHSSEVITQDYTRHHPOOLSAPLP 2160
Db 2101 AHLPHLRPLPESQSSPPLQTAGVKGHORVVTLAQHSSEVITQDYTRHHPOOLSAPLP 2160
Qy 2161 APLYSFPGASCPVLDLRRPSSDLYLPPPDHGAARGSPHSEGGKRSPEPNKTSVLGGED 2220
Db 2161 APLYSFPGASCPVLDLRRPSSDLYLPPPDHGAARGSPHSEGGKRSPEPNKTSVLGGED 2220
Qy 2221 GIBPVSPPEGMTBPGHSRSNAVYLLYRDGTEQTPSRMGSKSPGNTSQPPAFFSKLTESNS 2280
Db 2221 GIBPVSPPEGMTBPGHSRSNAVYLLYRDGTEQTPSRMGSKSPGNTSQPPAFFSKLTESNS 2280
Qy 2281 AMVYSKKQEIINKLNTNHRNEPEVNI SQPTEIFNMPAITGTGLMTRYSOAQVEHASTNM 2340
Db 2281 AMVYSKKQEIINKLNTNHRNEPEVNI SQPTEIFNMPAITGTGLMTRYSOAQVEHASTNM 2340
Qy 2341 GLEAIIRKALMGKYDOWESSPPLSANAFNPLNASASLPAAMPITAAADGRSDHDLTSPGGG 2400
Db 2341 GLEAIIRKALMGKYDOWESSPPLSANAFNPLNASASLPAAMPITAAADGRSDHDLTSPGGG 2400
Qy 2401 GKAKVSGRPSRRKAKSPAGLADGRPPSVSSVHSEGCDCNRRTPLTNRVWEDRPPSAGST 2460
Db 2401 GKAKVSGRPSRRKAKSPAGLADGRPPSVSSVHSEGCDCNRRTPLTNRVWEDRPPSAGST 2460
Qy 2461 PFPYNPLIMRLQGVNASPPPGPLPAGSGPLAGPHAWDEEPKPLICSQYETLSDSE 2517
Db 2461 PFPYNPLIMRLQGVNASPPPGPLPAGSGPLAGPHAWDEEPKPLICSQYETLSDSE 2517

RESULT 2

US-09-819-104A-2

; Sequence 2, Application US/09819104A

; Publication No. US20030027137A1

; GENERAL INFORMATION:

; APPLICANT: Chen, J. Don
; TITLE OF INVENTION: NOVEL NUCLEAR RECEPTOR COREPRESSOR MOLECULES
; FILE REFERENCE: AND USES THEREFOR
; CURRENT APPLICATION NUMBER: US/09/819,104A
; CURRENT FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: 60/193,138
; PRIOR FILING DATE: 2000-03-29
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2507
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-819-104A-2

Query Match 98.2%; Score 12978; DB 10; Length 2507;
Best Local Similarity 98.3%; Pred. No. 0;
Matches 2483; Conservative 3; Mismatches 13; Indels 26; Gaps 3;
Qy 1 MSGSTQVLAQTWRAATEPRYPHSLSYVQIARTHTDVGLEYQHHSRDYASHLSPGSIQ 60
Db 1 MSGSTQVLAQTWRAATEPRYPHSLSYVQIARTHTDVGLEYQHHSRDYASHLSPGSIQ 60
Qy 61 PORRPSLLSEFQPGNERSQELHLPESHLYLPGLKSEMFEIESKPRLELLPDLLRP 120
Db 61 PORRPSLLSEFQPGNERSQELHLPESHLYLPGLKSEMFEIESKPRLELLPDLLRP 120
Qy 121 SPLLATGQAGSBDLTGKLSLTKLEPVPSPSPHTDPELELVPRLSKBELTONMDRVD 180
Db 121 SPLLATGQAGSBDLTGKLSLTKLEPVPSPSPHTDPELELVPRLSKBELTONMDRVD 180
Qy 181 REITVMEQQLSKUKKQQLLEBAKPPPEKPVSPPIESKHSRLVQIILYDENRKAEEA 240
Db 181 REITVMEQQLSKUKKQQLLEBAKPPPEKPVSPPIESKHSRLVQIILYDENRKAEEA 240
Qy 241 AHRILEGLGPQVELPLYNQPSDTROYHENIKINQAMRKKLLILYFKRNHARKQWKQKFCQ 300
Db 241 AHRILEGLGPQVELPLYNQPSDTROYHENIKINQAMRKKLLILYFKRNHARKQWKQKFCQ 300
Qy 301 RYDQLEALEKKVERIENNNRRRAKESKVREYVEKQFPEIRKORELOERNQSRVGQSG 360
Db 301 RYDQLEALEKKVERIENNNRRRAKESKVREYVEKQFPEIRKORELOERNQSRVGQSG 360
Qy 361 LMSAARSSEHYSEIIDGLSEQENLEKQMLQAVIPPMYLDADQQRKFINNMGLMADPM 420
Db 361 LMSAARSSEHYSEIIDGLSEQENLEKQMLQAVIPPMYLDADQQRKFINNMGLMADPM 420
Qy 421 KYVKDRQVNMWMSSEQEKETFREKFMQHPKNFGLIASFLERKTVAECVLYYLTCKQENYK 480
Db 421 KYVKDRQVNMWMSSEQEKETFREKFMQHPKNFGLIASFLERKTVAECVLYYLTCKQENYK 480
Qy 481 SLVRRSYRRRGSKSQQQQQQQQQQQQQQQQQQQQQQPPRRSQEKEKEKEKEKEKEKEKE 540
Db 481 SLVRRSYRRRGSKSQQQQQQQQQQQQQQQQQQQQQQPPRRSQEKEKEKEKEKEKEKEKE 540
Qy 541 DKEDLLKTKTDTSQGDNDKEKAVASKGRKTANSQGRKGRITRSMANEANSSEAITPQQ 600
Db 541 DKEDLLKTKTDTSQGDNDKEKAVASKGRKTANSQGRKGRITRSMANEANSSEAITPQQ 600
Qy 601 SAELASMELNESSRWTEEMETAKGLLEHGRNWSAIARMVGSKTYSQCNFYFNKQKQ 660
Db 601 SAELASMELNESSRWTEEMETAKGLLEHGRNWSAIARMVGSKTYSQCNFYFNKQKQ 660
Qy 661 NLDEILQOHLKXWEKERNARRKKKAPAAASEAAFPVVVEDEMEASGVSGNEEBKVEE 720
Db 661 NLDEILQOHLKXWEKERNARRKKKAPAAASEAAFPVVVEDEMEASGVSGNEEBKVEE 720
Qy 721 AEALHASGNEVPRGECGSPATVNNSSDTSIESPSPHTAAKDTQNGPKPPATLGAQPPP 780
Db 721 AE-----ATVNNSSDTSIESPSPHTAAKDTQNGPKPPATLGAQPPP 780
Qy 781 GPPTPPRTRAPIETPTASEATGAPPPAPSPSAPPVPPVPKEKEEETAAAPVVEEG 840

QY 2190 HCAPARGSPHSEGGKSPBNKTSVLGGGEGDIEPVSPPEGMTEPGHRSRSAVYLLYRDG 2249
Db 2135 HGTTPARGSPHSEGGKSPBNKTSVLGGGEGDIEPVSPPEGMTEPGHRSRSAVYLLYRDG 2194
QY 2250 EQTEPSRMGSKSPGNTSQPPAFPSKLTESNMAVKSQKQEIKNKLNTHNRNPEYNIQSP 2309
Db 2195 EQGEP-RMGSKSPGNTSQPPAFPSKLTESNMAVKSQKQEIKNKLNTHNRNPEYNIQSP 2253
QY 2310 GTEIFNMPALITGLMTYRSQAQVEHASTNMGLEAIIIRKALMGKYDQWEESPPLSANAFN 2369
Db 2254 GTEIFNMPALITGLMTYRSQAQVEHASTNMGLEAIIIRKALMGKYDQWEESPPLSANAFN 2313
QY 2370 PLNASASLP-AAMPITAAAGRSDHITLTPCGGGKAKVSGRPSRKAQSPAGIASGDRPP 2428
Db 2314 PLNASASLP-AAMPITAAAGRSDHITLTPCGGGKAKVSGRPSRKAQSPAGIASGDRPP 2373
QY 2429 SVSVHSEGDGNCNRTPLNWRWEDRPSAGSTPPFNPLIMRLOAGVMASSPPPGLPAGS 2488
Db 2374 SVSVHSEGDGNCNRTPLNWRWEDRPSAGSTPPFNPLIMRLOAGVMASSPPPGLPAGS 2433
QY 2489 GPLAGPHAWDEPKPLLCQYETLSDSE 2517
Db 2434 GPLAGPHAWDEPKPLLCQYETLSDSE 2462

RESULT 4
US-10-351-750-1
; Sequence 1, Application US/10351750
; Publication No. US20030138836A1
; GENERAL INFORMATION:
; APPLICANT: THE SALK INSTITUTE FOR BIOLOGICAL STUDIES
; APPLICANT: EVANS, RONALD
; APPLICANT: CHEN, J.
; TITLE OF INVENTION: TRANSCRIPTIONAL CO-REPRESSOR THAT INTERACTS WITH NUCLEAR HORMONE
; FILE OF INVENTION: RECEPTORS
; FILE REFERENCE: SALK1510-2
; CURRENT APPLICATION NUMBER: US/10/351,750
; PRIOR FILING DATE: 2003-01-23
; PRIOR APPLICATION NUMBER: US/09/337,384
; PRIOR FILING DATE: 1999-06-21
; PRIOR APPLICATION NUMBER: 08/522,726
; PRIOR FILING DATE: 1995-09-01
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1
; LENGTH: 1495
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-351-750-1

Query Match 59.6%; Score 7871; DB 14; Length 1495;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1487; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1031 DKEAFAAEAKLPDPCWTSGLFPFPPREVIKASPHADPPSAFSAVYAPGHPPLPLGLHD 1090
Db 9 DKEAFAAEAKLPDPCWTSGLFPFPPREVIKASPHADPPSAFSAVYAPGHPPLPLGLHD 68
QY 1091 TARPVLPRPTTGNPPPLISSAKHPSVLERQIGAI SQGMSVOLHVYSEHAKAPVGPVTM 1150
Db 69 TARPVLPRPTTGNPPPLISSAKHPSVLERQIGAI SQGMSVOLHVYSEHAKAPVGPVTM 128
QY 1151 GLPLPMDPKKLAPFSGVKQQLSPRGQAGPESLGVPTAQEASVLRGTALGSPVGGSIK 1210
Db 129 GLPLPMDPKKLAPFSGVKQQLSPRGQAGPESLGVPTAQEASVLRGTALGSPVGGSIK 198
QY 1211 GIPSTRVPSDAITYRGSITHTGPADVLKGTITRIIGEDSPSRDLDRGSDSLPKGHVY 1270
Db 189 GIPSTRVPSDAITYRGSITHTGPADVLKGTITRIIGEDSPSRDLDRGSDSLPKGHVY 248
QY 1271 EGKKGHVLSYEGGMSVTCQSKEDGRSSGPPHETAAKRTYDMMEGRVGRAISSASIEGL 1330

Db 249 EGKKGHVLSYEGGMSVTCQSKEDGRSSGPPHETAAKRTYDMMEGRVGRAISSASIEGL 308
QY 1331 MGRAIPPPRHSPHLKEQHIIIRGSIQTGIPRSYVEAQEDYLREAKLKRCTGTPPPPPS 1390
Db 309 MGRAIPPPRHSPHLKEQHIIIRGSIQTGIPRSYVEAQEDYLREAKLKRCTGTPPPPPS 368
QY 1391 RDLTRAYTQALGPKLKAHEGLVATVKEAGRSIHEIPREELRHTPELPLAPRLKEGS 1450
Db 369 RDLTRAYTQALGPKLKAHEGLVATVKEAGRSIHEIPREELRHTPELPLAPRLKEGS 428
QY 1451 ITQGTPLKYDTCASITGSKKHVDVRSILIGSPGRTFPPVHPPLDVMADARALERACYESLSK 1510
Db 429 ITQGTPLKYDTCASITGSKKHVDVRSILIGSPGRTFPPVHPPLDVMADARALERACYESLSK 488
QY 1511 RPTGASSSGSIARGAPVIVPELKGPROSPLTYEDHGAPFAGHLPRGSPVTWRETPRLQ 1570
Db 489 RPTGASSSGSIARGAPVIVPELKGPROSPLTYEDHGAPFAGHLPRGSPVTWRETPRLQ 548
QY 1571 EGSLSSSKASQDRKLTSTPREIAKSPHSTVPPHHPHPTSPYEHLLRGVGVLDYRSHIPL 1630
Db 549 EGSLSSSKASQDRKLTSTPREIAKSPHSTVPPHHPHPTSPYEHLLRGVGVLDYRSHIPL 608
QY 1631 AFDPTSIPIRGIPIDAAAAYLPHLAPNPTYPHLYPPYLRGYPDTAALENQTIINDYI 1690
Db 609 AFDPTSIPIRGIPIDAAAAYLPHLAPNPTYPHLYPPYLRGYPDTAALENQTIINDYI 668
QY 1691 TSQOMHNTATAMAQADMLRGLSPRESSLALNYAAGPRGIIIDLQVPHLPVLVPTPGT 1750
Db 669 TSQOMHNTATAMAQADMLRGLSPRESSLALNYAAGPRGIIIDLQVPHLPVLVPTPGT 728
QY 1751 PATAMDRLAYLPTAQPPSSRSHSSPLSPGGGTHLTKPTTTSSSRERDRDRDRDR 1810
Db 729 PATAMDRLAYLPTAQPPSSRSHSSPLSPGGGTHLTKPTTTSSSRERDRDRDRDR 788
QY 1811 EKSILTTSTTTTTHAPVWRPGTQSSGSGSGSGSGSGSGSGSGSGSGSGSGSGSGSGSG 1870
Db 789 EKSILTTSTTTTTHAPVWRPGTQSSGSGSGSGSGSGSGSGSGSGSGSGSGSGSGSGSG 848
QY 1871 LQORPSVLHNTGMKGIIITAVEPSKPTVLRSTSTSPVRPAATFPPATHCPLGGTLDGVYP 1930
Db 849 LQORPSVLHNTGMKGIIITAVEPSKPTVLRSTSTSPVRPAATFPPATHCPLGGTLDGVYP 908
QY 1931 TLMPEVLLPKEAPRVARPERPRADTGHAFLAKPPARSGLLEPASSKSGSEPRPLVPVSG 1990
Db 909 TLMPEVLLPKEAPRVARPERPRADTGHAFLAKPPARSGLLEPASSKSGSEPRPLVPVSG 968
QY 1991 HATIARTPAKNLAPHASDPDPAPASADPHREKTQSKPFSIQEELRSLGVHSGSYSP 2050
Db 969 HATIARTPAKNLAPHASDPDPAPASADPHREKTQSKPFSIQEELRSLGVHSGSYSP 1028
QY 2051 EGVEPVSPVSPSLTHDKGLPKHLELDKSHLEGLRKPQGPVKLGGBAAHLPHLRPLP 2110
Db 1029 EGVEPVSPVSPSLTHDKGLPKHLELDKSHLEGLRKPQGPVKLGGBAAHLPHLRPLP 1088
QY 2111 ESQPSSSLQITAPGVKGHQRVVTLLAQHISEVITQDTRHHQOOLSAPLAPLYSPFGAS 2170
Db 1089 ESQPSSSLQITAPGVKGHQRVVTLLAQHISEVITQDTRHHQOOLSAPLAPLYSPFGAS 1148
QY 2171 CPVLDIRRPPSDLYLPPDPHGAPARGSPHSEGGKSPBNKTSVLGGGEGDIEPVSPPEG 2230
Db 1149 CPVLDIRRPPSDLYLPPDPHGAPARGSPHSEGGKSPBNKTSVLGGGEGDIEPVSPPEG 1208
QY 2231 MTEPGHRSAAVYLLYRDGEQTEPSRMGSKSPGNTSQPPAFPSKLTESNMAVKSQKQEI 2290
Db 1209 MTEPGHRSAAVYLLYRDGEQTEPSRMGSKSPGNTSQPPAFPSKLTESNMAVKSQKQEI 1268
QY 2291 NKKLNTNHNENPEYNIISQGTETFNMPALITGLMTYRSQAQVEHASTNMGLEAIIIRKAL 2350
Db 1269 NKKLNTNHNENPEYNIISQGTETFNMPALITGLMTYRSQAQVEHASTNMGLEAIIIRKAL 1328
QY 2351 MGKYDQWEESPPLSANAFNPLNASASLPAAAMPITAAAGRSDHITLTPSGGGGKAKVSGRPS 2410
Db 1329 MGKYDQWEESPPLSANAFNPLNASASLPAAAMPITAAAGRSDHITLTPSGGGGKAKVSGRPS 1388

Qy	2411	SRKAKSPAPGLASGDRPPSVSSVHSEGDGNCNRRTPLTNRVWEDRPSSAGSTPPFPYNPLIMR	2470
Db	1389	SRKAKSPAPGLASGDRPPSVSSVHSEGDGNCNRRTPLTNRVWEDRPSSAGSTPPFPYNPLIMR	1448
Qy	2471	LOAGVMASPPPGLPAGSGPLAGPHHAWDEPKLLCSQVETLSDSE	2517
Db	1449	LOAGVMASPPPGLPAGSGPLAGPHHAWDEPKLLCSQVETLSDSE	1495
RESULT 5			
US-10-087-192-651			
; Sequence 651, Application US/10087192			
; Publication No. US20020182586A1			
; GENERAL INFORMATION:			
; APPLICANT: Morris, David W.			
; APPLICANT: Engelhardt, Eric K.			
; TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR			
; TITLE OF INVENTION: CANCER			
; FILE REFERENCE: 529452000122			
; CURRENT APPLICATION NUMBER: US/10/087,192			
; CURRENT FILING DATE: 2002-03-01			
; PRIOR APPLICATION NUMBER: US 09/747,377			
; PRIOR FILING DATE: 2000-12-22			
; PRIOR APPLICATION NUMBER: US 09/798,586			
; PRIOR FILING DATE: 2001-03-02			
; NUMBER OF SEQ ID NOS: 2059			
; SOFTWARE: FastSeq for Windows Version 4.0			
; SEQ ID NO 651			
; LENGTH: 1585			
; TYPE: PRT			
; ORGANISM: Mus musculus			
US-10-087-192-651			
Query Match 50.6%; Score 6685; DB 12; Length 1585;			
Best Local Similarity 79.4%; Pred. No. 2.4e-298;			
Matches 1327; Conservative 72; Mismatches 155; Indels 118; Gaps 26;			
Qy	295	KQFCQRYDQIMEALEKKVRIENPPRRRAKESKVRYYEYKQFPEIRKQELQERMOSRV	354
Db	1	BQFPCQRYDQIMEAWEKKVRIENPPRRRAKESKVRYYEYKQFPEIRKQELQERMOSRV	60
Qy	355	GORGSGLSMSAARSEHEVSEIIDGLSQENLEKQMRQLAVIPPMYDADQORIKFINMNG	414
Db	61	GORGSGLSMSAARSEHEVSEIIDGLSQENLEKQMRQLAVIPPMYDADQORIKFINMNG	120
Qy	415	LMADPMKVYKDRQYMNMMWSQEKETPFREKFWQHPKFNGLIASFLERKTVAECVLYYLTK	474
Db	121	LMDDPMKVYKDRQVTNMWSEQRDTFREKFWQHPKFNGLIASFLERKTVAECVLYYLTK	180
Qy	475	KNENYKSLVRSYRRRGSKSQOQQOQQOQQOQQOQQOQMPRSSQBEKDEKEKEAEEKEE	534
Db	181	KNENYKSLVRSYRRRGSKSQOQQOQQOQQOQQOQQOQ---MARSSQBEKEKEAEEKEE	236
Qy	535	KPEVENDKEDLLKBEKTDGSDENDEKEAVASKGRKTANSQGRKRGKGRITRSMANEANSEE	594
Db	237	KQDAENKEELSKEKTDGSDENDEKEAVASKGRKTANSQGRKRGKGRITRSMANEANHEE	296
Qy	595	AITPQQAELASMBELNFSRRWTEEMETAKKGLLEHGRNWSAIAARMVGSKTIVSQCKNFYF	654
Db	297	TATPQSSSELASMBENFSRRWTEEMETAKKGLLEHGRNWSAIAARMVGSKTIVSQCKNFYF	356
Qy	655	NYKKRONLDELLOHKLKMEKERNARKKKKAPAAAEFAAFPPVVEDEMEASGVSGNE	714
Db	357	NYKKRONLDELLOHKLKMEKERNARKKKKTPAAASEETATFPAAAEDEMEASGASANE	416
Qy	715	EEWVEEAEALHASGNEVPR-GECSGPATVNNSSDTEIPSPHTEAAKDTGQNGPKPPAT-	772
Db	417	EELAEAEASQASGNEVPRVGECSGPAVNNSSDTEVSPRSEATKDT---GPKPTGTE	473
Qy	773	LGADGPPPGPPTPPRTSRAPTEBTPPASBATGATPTPPAPPPSPAPPPVVPVKEEKEET	831
Db	474	ALPAATOPPVV--PPEEPAAAPAPSPVPDASGSPSPSPS--PSPAAPATVVDKDEOAPPA	530

Qy	832	AAAPPVEBQEQKPPAAAEELAVDTGKAEP-----VKSECTESAEBGPA-KGKDAE	881
Db	531	APAPQTEADAEQKSEABE---IDVGPEEPEASEEPPEPVKSHKKEETEEPEDKAKGTE	587
Qy	882	AAEATAEGALKAEKKGSGGRATT-AKSSCAPODSSSATSADADEVDEAGGDKRLSP	940
Db	588	AIETVSEAPLKVE--EAGSKAAVTKGSSSATSADADEVDEPGGDKRLLSP	645
Qy	941	RPSLLTGTGPPRANASPKQLDLKQLKQRAAAIPIPIQTVKHVEPPREDAAPTAPAPP	1000
Db	646	RPSLLTGTAGDPRASTSPKQLDLKQLKQRAAAIPIPI-VTKHVEPPREDTVPKXVPVP	704
Qy	1001	PPQNLQPEDAPQOQSSPRGKSRSPAPPADKE-----AFAAEAKLPGDPPCWTSG	1052
Db	705	PTQHLPQEGDVSOQSGSPRGKSRSPVPPAEKAEKPAFPAPFTEGPKLPTPEPRWSSG	764
Qy	1053	LPPEVPPREVIKASPHAPDPSASYAPPGHPLPLGLHDTPARPVLPRPPTISNPPPLISSA	1112
Db	765	LPPEIPPREVIKPSHAADPSASYTPPGHPLPLGLHDSARPVLPRPP-ISNPPPLISSA	823
Qy	1113	KHPSVLERQIGATISQGSVGLHPVYSEHAKAPVPTMGLPLMDPKLAPFSGVKQEQL	1172
Db	824	KHPCVLERQIGALISQGSVGLRVPHSEHAKAPMGLTMGLPLAVDPKKL-----	872
Qy	1173	SPRQAGPPESLGVPTAQEASVLRTALGVSPPGGSITKGIPTSRVPSDSAITYRGSIITHG	1232
Db	873	-----GTALGSATSGSITKGLPSTRAADGP--SYRGSITHG	906
Qy	1233	TPADVLYKGIITRIIGHEDSPRILDRGEDSLPKGHVITYEGKKGHVLSYEGGMSVTCQSKE	1292
Db	907	TPADVLYKGIISRIVGEDSPRILDRAREDLPKGHVITYEGKKGHVLSYEGGMSVTCQSKE	966
Qy	1293	DGRSSGPPHETAPKRTYDMRGVRGCRATSSASIEGLMGRAIIPPERHSPHLLKEQHHR	1352
Db	967	DGRSSGPPHETAPKRTYDMRGVRVORTVSASIEGLMGRAI-PEQHSP-HLKEQHHR	1024
Qy	1353	GSITQIGIPRSYVEAQEDYLREAKLKKRECTPPPPPSRDLTBAYKTQ---ALGPLKLKP	1409
Db	1025	GSITQIGIPRSYVEAQEDYLREAKLKKRECTPPPPPPRDLTETYPKRPDLPLGLPLKLKP	1084
Qy	1410	AHEGLVATVEAGRSIHEIPREBLRHTPELPLAPRPLKEGSIITQGTPLKYDTGASTGSK	1469
Db	1085	THEGVATVEAGRSIHEIPREBLRHTPELPLAPRPLKEGSIITQGTPLKYDVSAPSTGTK	1144
Qy	1470	KHDVRSILIGSPGRTFPPVPHPLDVMAARALERACYESLSKRSGTSSSGSITARGAPVI	1529
Db	1145	KHDVRSILIGSPGRTFPPVPHPLDVMAARALERACYESLSKRSGTSSSGSITARGAPV	1204
Qy	1530	VPELGKPRQPLTYEDHGAPFAGHLPGRGSPVTMREPTPRIQESGLSSKASQDRKLTSTP	1589
Db	1205	VPELGKPRQPLTYEDHGAPFTSHLPGRGSPVTMREPTPRIQESGLSSKASQDRKLTSTP	1264
Qy	1590	REIAKSPHSTVPEHHPHIPISPYEHLIRGVSDVLYKSHIPLAFDPTSIPIRGIPLD-AAAA	1648
Db	1265	REIAKSPHSTVPEHHPHIPISPYEHLIRGVSDVLYKSHIPLAFDPTSIPIRGIPLEAAAAA	1324
Qy	1649	YYLPRHLAPNTPVPHLYPPVLYRGYDPTALENRQTIINDYIITSQOMHNTATAMAQRAD	1708
Db	1325	YYLPRHLAPNTPVPHLYPPVLYRGYDPTALENRQTIINDYIITSQOMHNTAAAMAQRAD	1384
Qy	1709	MLRGLSPRESSALNVAAGPRGIIDLSQVPHLPVLPVPTGCTPATMDRLAYLPTAPOPF	1768
Db	1385	MLRGLSPRESSALNVAAGPRGIIDLSQVPHLPVLPVPTGCTPATMDRLAYLPTAPPPF	1444
Qy	1769	SSRHSSSPLSPGQPTHLYTKPTTTTSSSERERDRDRDRERKSIJLTSTTTVEHAPIWR	1828
Db	1445	SSRHSSSPLSPGQPTHLYTKPTTTTSSSERERERERERD-----KSILJLTSTTTVEHAPIWR	1498
Qy	1829	PGTEQSSGSGSGGGGSSRRPASHAHQHSPIPSRPTODALQORPSVLHNTGMKGIIIT	1888
Db	1499	PGTEQSSGA-----GGSSRRPASH--HQHSPIPSRPTODALQORPSVLHNTSMKGVV	1548

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QY 1889 AVEPSKPTVLRSTSTSPVRPAA-----TTPPATHCPLGLTLDGVYPTLMPEP 1935
Db 1549 -----SRGTRAHGPEVHLHLFACPPSCHIPTCHPL-----PTWWHP 1585

RESULT 6
US-10-146-473-54
; Sequence 54, Application US/10146473
; Publication No. US20030108888A1
; GENERAL INFORMATION:
; APPLICANT: Scanlan, Matthew
; APPLICANT: Gout, Ivan
; APPLICANT: Stockert, Elisabeth
; APPLICANT: Gure, Ali
; APPLICANT: Chen, Yao-Tseng
; APPLICANT: Old, Lloyd
; TITLE OF INVENTION: Breast Cancer Antigens
; FILE REFERENCE: L00461/70130(JRV)
; CURRENT APPLICATION NUMBER: US/10/146,473
; CURRENT FILING DATE: 2002-05-15
; PRIOR APPLICATION NUMBER: US 60/291,150
; PRIOR FILING DATE: 2001-05-15
; NUMBER OF SEQ ID NOS: 82
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 54
; LENGTH: 876
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-146-473-54

Query Match 34.9%; Score 4611; DB 14; Length 876;
Best Local Similarity 94.7%; Pred. No. 1.7e-203;
Matches 873; Conservative 0; Mismatches 3; Indels 46; Gaps 1;

QY 1596 PHSVTEHHPHPTSPYEHLLRGVGVDLVRSHPIDAFDPTSPRGIPLDAAAAYLPRHL 1655
Db 1 PHSVTEHHPHPTSPYEHLLRGVGVDLVRSHPIDAFDPTSPRGIPLDAAAAYLPRHL 60

QY 1656 APNPTVPHLYPPVILRGYPDTALENRQTLINDYITSQQMHNTATAMQADMLRGLSP 1715
Db 61 APNPTVPHLYPPVILRGYPDTALENRQTLINDYITSQQMHNTATAMQADMLRGLSP 120

QY 1716 RESSLALNVAAGPRGIIDLSQVPHLPVLPVPTGPTATAMDRLAYLPTAPQFFSSRSHSS 1775
Db 121 RESSLALNVAAGPRGIIDLSQVPHLPVLPVPTGPTATAMDRLAYLPTAPQFFSSRSHSS 180

QY 1776 PLSPGGPTHLTKPTTSSSERERDRDRDREREKSIILSTTTVEHAPIWRPGTEQSS 1835
Db 181 PLSPGGPTHLTKPTTSSSERERDRDRDREREKSIILSTTTVEHAPIWRPGTEQSS 240

QY 1836 GSSGSSGGGSSRRPASHAHQHSPISPRTODALQORPSVLHNTGMKGIIITAVEPSTP 1895
Db 241 GSSGSSGGGSSRRPASHAHQHSPISPRTODALQORPSVLHNTGMKGIIITAVEPSTP 300

QY 1896 TVLRSTSTSPVRPAATFPFATHCPLGGTLDGVYPTLMPEVLLPKCAPRVARPERPADT 1955
Db 301 TVLRSTSTSPVRPAATFPFATHCPLGGTLDGVYPTLMPEVLLPKCAPRVARPERPADT 360

QY 1956 GHAFAPAPARSGLSPASSPSKGSERPLVPVPSGHATTARTPAKNLAPHASDPDPAPP 2015
Db 361 GHAFAPAPARSGLSPASSPSKGSERPLVPVPSGHATTARTPAKNLAPHASDPDPAPP 420

QY 2016 ASASDPHREKTSQKPSIOELELRSIYGXGSSYSPGEGVPSVSPSLTHDKGLPKHLE 2075
Db 421 ASASDPHREKTSQKPSIOELELRSIYGXGSSYSPGEGVPSVSPSLTHDKGLPKHLE 480

QY 2076 ELDKSHLEGELRKPQCPVKLGGEAAHPLHLRPLPESQSPSSPLLQATPGVKGHQVWTL 2135
Db 481 ELDKSHLEGELRKPQCPVKLGGEAAHPLHLRPLPESQSPSSPLLQATPGVKGHQVWTL 540

QY 2136 AQHISEVITQDYTRHHPOQLSAPLPAFLVSPFGASCFLVDRPPSDLYLPPDHGAPAR 2195
Db 541 AQHISEVITQDYTRHHPOQLSAPLPAFLVSPFGASCFLVDRPPSDLYLPPDHGAPAR 600
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QY 2196 GSPHSEGGKRSPEPNKTSVLGGEDGIEFVSPPEGMTEPBGHSRSAYVPLLYRDGEOTERS 2255
Db 601 GSPHSEGGKRSPEPNKTSVLGGEDGIEFVSPPEGMTEPBGHSRSAYVPLLYRDGEOTERS 660

QY 2256 RMGSKSPGNTSQPPAFFSKLTESNAMYKSKQKOEINKLNTNHNPEPNISQPGTEIFN 2315
Db 661 RMGSKSPGNTSQPPAFFSKLTESNAMYKSKQKOEINKLNTNHNPEPNISQPGTEIFN 720

QY 2316 MPAITGTGLMYRSQAVQEHASTNNGLEAIIRKALMGKYDQWEESPPLSANAFNPLNASHA 2375
Db 721 MPAITGTGLMYRSQAVQEHASTNNGLEAIIRKALM----- 756

QY 2376 SLPAAAMPITAADGRSDHTLTSPGCGGKAKVSGRPSRSKAKSPAGLASGDRPPSVSVHS 2435
Db 757 -----GGGKAKVSGRPSRSKAKSPAGLASGDRPPSVSVHS 794

QY 2436 EGDENRRPTLTNRVWEDRPSSAGSTFPFYNPLIMRLQAGVMASPPPPGLPAGSGPLAGPH 2495
Db 795 EGDENRRPTLTNRVWEDRPSSAGSTFPFYNPLIMRLQAGVMASPPPPGLPAGSGPLAGAH 854

QY 2496 HAWDEEPKLLCSQYETLSDSE 2517
Db 855 HAWDEEPKLLCSQYETLSDSE 876

RESULT 7
US-10-341-434-236
; Sequence 236, Application US/10341434
; Publication No. US20030215835A1
; GENERAL INFORMATION:
; APPLICANT: OriGene Technologies
; TITLE OF INVENTION: Differentially Regulated Prostate Cancer Genes
; FILE REFERENCE: 9U 204 205 R1
; CURRENT APPLICATION NUMBER: US/10/341,434
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 60/348,164
; PRIOR FILING DATE: 2002-01-15
; PRIOR APPLICATION NUMBER: US 60/348,119
; PRIOR FILING DATE: 2002-01-15
; NUMBER OF SEQ ID NOS: 238
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 236
; LENGTH: 2440
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-341-434-236

Query Match 31.5%; Score 4165.5; DB 15; Length 2440;
Best Local Similarity 40.8%; Pred. No. 1.6e-182;
Matches 1103; Conservative 344; Mismatches 777; Indels 477; Gaps 109;

QY 16 EPRYPHSLSYVQVQARTHTDVLLEYQ--HHSRDYASHLSPGSIIOPORRRPSLLSEFQ 73
Db 17 QGRYPHSPYQVTFPNTRHQEFAPVDYRSSHLEVSQASQLQQQQQQQLRRRPSLLSEPH 76

QY 74 PCNERSQELHLHPESHSLYLPGLKSEMEFIESKRPRLELLPD-----PLLRPSP 122
Db 77 PGSDRQPE--RTSTYEPFHPGSPVDHDSLEKRPLEQVSDSHFORVSAANVLPLVHPLP 134

QY 123 LLATGQAGSEDLTKDRSLTGKLE-FVSPSPPHPTDPELELVPPRLSKKEELIONMDRVDOR 181
Db 135 ---EGLRA-SADAKKDPAGFGKHEAPSSPISQPCGDDQNVASPSKLSKEELIQSMDRVDOR 190

QY 182 EITWVEQOIKLKKQOQLEEEAAKPEPEKVPSPPIESKHSLSVQIYDENRKAEEA 241
Db 191 EIAKVEQOIKLKKQOQLEEEAAKPEPEKVPSPPIESKHSLSVQIYDENRKAEEA 250

QY 242 HRILEGLGQVQLPLYNQPSDTRQVHENIKINQAMRKLLILFKRNHARKQWKQKFCOR 301
Db 251 HKIFEGLGKVELPLYNQPSDTRQVHENIKINQAMRKLLILFKRNHARKQWKQKFCOR 310

QY 302 YDQLEALEKKVERIENNPRRRRAKSKVREYKEQFPPEIRKORELOERMQSRVQGRGSL 361
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Db 2410 -----NSQELSVERTTKASVPPDLPPPPQ-----APVDEPQA-----R 2447
QY 1471 HDVRSLIGSPGRTPP---PVHPLDVMDARALERACYEESILKSRPGTASSSGGSIARGAPV 1528
Db 2448 FRVHSIESDPVTPPSIPITLPSV-----TAALKSPPVASG--- 2487
QY 1529 IVPGLKPROSP-----ITYEDHGAPFAGHLPRGSPVTMRBPTPLRQEGSLSS---SK 1578
Db 2488 -----GIPHOSPTKVTWITROE-----EPRAQSTPSPALPDPDTKASDVDT 2530
QY 1579 ASQDKLTSPREIAKS-----PHSTVPEHHPHPTSPVEHLLRGVSGVDLYR 1625
Db 2531 SSTLRKILMDPKVVSATSVTSTVTTAIEPVAAPCLHEAPPPVD-----SKPLEE 2584
QY 1626 SHIPLAPDPTSIPRGIPLDAAYYLPHILAPNPTPHLYPYLIRGYPDTAALENRQTI 1685
Db 2585 KTAPPVTNNSEIQASEVLVAADKEKVAPIAPKIT-----SVISRMPPVSIIDENSQKI 2637
QY 1686 INDYITSOQHHNTATAMAQRADMLRGLSPRESSLAINYAAGPRGIIDLQVPHLPVLVP 1745
Db 2638 -----TLAKAPQTLTGL-----VSALTGLVNVSLVP-VNALKG 2670
QY 1746 PTPGTATAMDRLAYLPTAQPPSSRHSSSPLSPGGPHTLTKPTTSSSERERDRDRERD 1805
Db 2671 PVKGSVTLTKSLVS-----TPAGEVNVLKGPV----- 2697
QY 1806 RDREREKSIILTTTVEHAPI-----WRPGTEQSSGS-----SGSS 1841
Db 2698 -----NVLTGPNVLTTPVNAVGTVNAAGTVAASAASAVNATASAVTTAGAVTAAS 2750
QY 1842 GGGGGS-----SSRPASHSHAHQHPISPRQTODALQQRPSVLHNTGMKGIIIT 1888
Db 2751 GGVTAITGVTMAGAVIAPSTCKQRASANENSRFHPGSMPIVDDRPA---DAG-SGAGL 2806
QY 1889 AVFSPKPTVLRS---TSSPVRPAA---TFPPTHCPGLGTLGCVPTLMEPVLPLKEA 1942
Db 2807 RVNTSEGWLLSYSGKTEGFORISAKISQIPPAS-----AMDIEFQOSVSKSQVKPDS 2860
QY 1943 PRVARP---ERPRADTGHAFIA-----KPPARSGLPASPSSPKSGSPRPL--- 1984
Db 2861 VTASQPPSKGQAPAGVANVATHSTLVLTQATNAPSVISSVK-ADRPGL-EKPEFIHLS 2918
QY 1985 -----VPPVSGHATARTPA----- 1999
Db 2919 VSTPVTQGGTVKVLTCGINTPPVLVHNLVLTFSIVTNKKLADPVLTKIETKVLQPAUL 2978
QY 2000 -KNLAPHASDPDPAPASADP--HREKTQSKFP--SIQELRSLGIVHGSSYSEGVTE 2054
Db 2979 GSTLTTPHH-----PPALPSKLPTENVHVPVSGPSIPADRTVSHLAAAKLDAHSPPRSGFGPS 3034
QY 2055 PVSPVSPSLTHDKGL-----PKH--LEELDKSHL-- 2082
Db 3035 SPPRASHPSASTALSTNATVMMLAAGIPVQPFISIHPEQSVIMPHSITQTVLSHLHS 3094
QY 2083 EGELRPKQPG-----PVKLGGEAAHLPHLRPLPSQSSPQLQATPCVKHGQRVWVLAQH 2138
Db 3095 QGVRMNTPTLPSITVSIIRPEALHSPR-APL---QP-----QIEVRA-- 3133
QY 2139 ISEVITQYTRHHIPOOLSAPLAPLPSYFPGASCPLVLDLRPPSD---LYLPPDPHGAPAR 2195
Db 3134 -----FORASTPQAP-----AGVPALASQHPPEEYVHLPVARATAPVQ 3174
QY 2196 GS-----PH-----SEGGKRSPEPNKTSVLGGGEG 2221
Db 3175 SEVLVMQSEVRLHPYTPVDVRIWHPHTVAVSEQPRAADGVVVKVPAPASKAP-----QQPG 3230
QY 2222 IEPVSPPEGTEPGHRSAY-----YPLLRYDGEQTEPSRMGSKSPGNTSQ-----PP 2269
Db 3231 KEAAKTPDAKAAPTTPAPVPVPLPAPAPAPHGE-----ARLTITPSNQLGCLPLTTP 3286
QY 2270 APFSKLTENSAMVSKKQKINKKLNTHNRNE---PEYNISQPGCTEIFNMPAITGTGLMTY 2327
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Db 3287 -----VVVTHGVQI-----VHSGSELFQERYGCD-----IRTY 3314
QY 2328 RSOAQVEH-----ASTNMGLEAIIIRKALMGKYDQWEE--SPPLSANAFNPLNASASLPAA 2382
Db 3315 HPPAQLTHTQFPAASSVGLPSRTKTAQOQPPPEGEPLQPPQVQSTQPAQAPPCPPSQ- 3373
QY 2383 ITAADGRSHLTSPGGGKAK---VSGRPSSRKAKSPAPGLASG--DRPP-----SVSSV 2433
Db 3374 -----LQPGQPPSSKMPQVSOEAKGTGTQVGEQFRLPAGPANRPEPHPTQVQRA 3422
QY 2434 HSB-GCNRRTPLTNRWEDRPSSAGSTPFPPYVNLIRLQAGVMASPPPPGLPAGSGPLA 2492
Db 3423 QASTGTSPSPSVSMKPDLPVSLFTQTAPKQPLFVPTTSG-----PSTPPG---LV 3472
QY 2493 GPHAWDEBPK-----ELLCSQ 2509
Db 3473 LPHTFQAPAKQDSSPHLTSQ 3493

RESULT 9.
US-10-177-293-423
; Sequence 423, Application US/10177293
; Publication No. US20030124128A1
; GENERAL INFORMATION:
; APPLICANT: Lillie, James
; APPLICANT: Glatt, Karen
; APPLICANT: Zhao, Xumei
; APPLICANT: Gannavaipu, Manjula
; APPLICANT: Kamatkar, Shubhangi
; APPLICANT: Mertens, Maureen
; APPLICANT: Myer, Vic
; APPLICANT: Wang, Youzhen
; APPLICANT: Xu, Yongyao
; APPLICANT: Hoersch, Sebastian
; APPLICANT: Monahan, John
; APPLICANT: Meyers, Rachel E.
; APPLICANT: East Jr., Robert C.
; APPLICANT: Hortobagyi, Gabriel N.
; APPLICANT: Pusztai, Lajos
; APPLICANT: Meric, Funda
; APPLICANT: Sahin, Aysegul
; APPLICANT: Mills, Gordon B.
; TITLE OF INVENTION: COMPOSITIONS, KITS, AND METHODS FOR IDENTIFICATION, ASSESSMENT,
; FILE REFERENCE: MRI-038
; CURRENT APPLICATION NUMBER: US/10/177,293
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,887
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/301,572
; PRIOR FILING DATE: 2001-06-27
; PRIOR APPLICATION NUMBER: US 60/306,501
; PRIOR FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: US 60/325,002
; PRIOR FILING DATE: 2001-09-25
; PRIOR APPLICATION NUMBER: US 60/362,585
; PRIOR FILING DATE: 2002-03-05
; PRIOR APPLICATION NUMBER: US 60/xxx,xxx
; PRIOR FILING DATE: 2002-05-14
; NUMBER OF SEQ ID NOS: 506
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 423
; LENGTH: 3664
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-177-293-423

Query Match 4.3%; Score 569.5; DB 14; Length 3664;
Best Local Similarity 19.6%; Pred. No. 2.5e-17;
Matches 568; Conservative 349; Mismatches 973; Indels 1011; Gaps 137;
QY 71 EFQPGNRSQELHLRPE-----SHSYLPELGKS-----EMEFIESKR---PRLLELP 114
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QY 1985 -----VPPVSGHATIARTPA----- 1399
Db 2919 VSTPVTGGTVKVLQTQINGTPPVLVHNLQVLTPTSITVTKKLDAPVTLKTIETKVLPANL 2978
QY 2000 -KNLAPHASPDPPAPPASADP--HREKTQSKPF--SIQELRLSLGVHSSYSPEGVE 2054
Db 2979 GSTLTTPH-----FPALPSKLPTEVNHVPSGPSIPADRTVSHLAAAKLDAHSPPSGGPS 3034
QY 2055 PVSFVSPSPTHDKGL-----PKH--LEBLDKSHL- 2082
Db 3035 SFPRASHPSSTASTALSTNATVLAAGIPVPQFISSTHPSQSVIMPHSITQTVSLSHLS 3094
QY 2083 EGBLRPKQPC-----PVKLGEAAHLPHLRPLPSQSSPILQTPGVCKHQHVTLAQH 2138
Db 3095 QGEVRMNTPLPSITYSIRPEALHSPR-AEL--QP-----OOIEVRA-- 3133
QY 2139 ISEVITQDTRHHPQOLASPLAPLYSPFCASCPVLDLRPPSD--LYLPPPDHGAPAR 2195
Db 3134 -----PQASTQAP-----AGVPALASQHPPEEVHYHLFVARATAPVQ 3174
QY 2196 GS-----PH-----SEGGKRSPEPNKTSVLGGEDG 2221
Db 3175 SEVLVMQSEYRLHPYTVPRDVRIMVHPHTAVSEQPRADGVVKKVPPASKAP---QOPG 3230
QY 2222 IEPVSPPEGTECHRSAY-----YPLLRYDGEQTEPSRMGSKSPGNTSQ-----PP 2269
Db 3231 KEAAKTPDAKAAPTPTPAPVPVPLPAPAPAPHGE-----ARILTVTPSNQQLPLTPP 3286
QY 2270 APFSKLTESAMVSKKIOINKLINTHNRNE--PEYNISQPGTEIFNMPAITGTGLMTY 2327
Db 3287 -----VVTHGVQI-----VHSGELFQETRYGD-----IRTY 3314
QY 2328 RSQAVQEH-----ASTNMGLEAIIRKALMGKYDQWEE--SPPLSANAFNPLNASASLPAAMP 2382
Db 3315 HPPAQLTHTQFPAASSVGLPSRTKTAQAQPPPEGEPLQPPQVQSTQPAQAPAPCPSPQ- 3373
QY 2383 ITAADGRSDHLTSPGGGKAK--VSGRPSRKAASPAAGIASG--DRPP-----SVSSV 2433
Db 3374 -----LGQPGQPPSSKMPQVSQEAQGTGTGVEQRLPAGPANRPPEPHTQVQRA 3422
QY 2434 HSE-GDCNRRTPLTNRWEDRPSASGTPPYNPLMLRLQAGVMASSPPPLPAGSGPLA 2492
Db 3423 QAGTGTPTSPSPVSVSMKPLPVSLLPTQATAPKQPLFVPTTSG-----PSTPPG---LV 3472
QY 2493 GPHAWDEEPK----PILCSQ 2509
Db 3473 LPHTFQAPKQDSSPHLTQ 3493

RESULT 10

US-10-263-929-144

; Sequence 144, Application US/10263929

; Publication No. US20040067535A1

; GENERAL INFORMATION:

; APPLICANT: Kim, Jaeseob

; APPLICANT: Galant, Ron

; TITLE OF INVENTION: Alzheimer's Disease Linked Genes

; FILE REFERENCE: LSD-07417

; CURRENT APPLICATION NUMBER: US/10/263,929

; CURRENT FILING DATE: 2002-10-03

; NUMBER OF SEQ ID NOS: 213

; SOFTWARE: PatentIn version 3.2

; SEQ ID NO 144

; LENGTH: 3551

; TYPE: PRT

; ORGANISM: Mus musculus

US-10-263-929-144

Query Match

Best Local Similarity 4.1%; Score 547; DB 12; Length 3551;

Matches 592; Conservative 346; Mismatches 1117; Indels 1056; Gaps 131;

QY 26 YPVQIARTHTDVGLLEYQHHSRDYASHLSFGSIQPORR-RPSLLSEFQPGNE----- 77

Db 543 YEMLTERRRERRGSGYSYQERTYIYENVRTPGTTPEDSRDYPARGREFYSEWETYQGEYY 602
QY 78 -----RSQELHLRPESHSLYLPGLKSEMFIETSKRPR-----LELLPDPLLR 119
Db 603 DSRYYDBPREYREYRSDPYEQDIREYSYQRERERERERERERERERERERERERERERERER 662
QY 120 PSLLATGQAGSDELTKD--RSL-----TKLEPVSPPP-----SPPH 156
Db 663 GRPQSPGVFAHSERLPFSFERLYRRSSERSGSCSVSPRYDYDKLEKARLERYTTKNEKA 722
QY 157 DPELELVPLRLSKEELIQNMMDRVDRITWVEQIISKLK-----KKQQLSEEAAPPEPE 211
Db 723 DKERTDPERVERERRIYRKEGKED--KAEROKRGKAHSPSSQSETQENDREOSPE 780
QY 212 KPVSPPPPIESKHSLSVQIYIDENRKEAAAH-----RILEGLGPQVLP----- 255
Db 781 KP-----RGSTKLSRDRADKEGPAKNRLELVPVLTAVKEGKGVIEHPPEKL 830
QY 256 -----LYNQP-----SDTROVHENIKINQAMRKLLILYFKRNHIA-- 290
Db 831 KARLGRDITTKALALDQKQAAQGEPAKSDPAR-----GKALREKVL-----PSHAEVG 878
QY 291 RKQWKQKFCQ--RYDQLEMALEKKVERIENPPRAKESKVREYVEKQFPEIRK----- 342
Db 879 EKEGRTKLRKHLKAEQTPBELSALDLKLEARKERFA-DSGLK--IEKQKPEIKKTSPE 935
QY 343 -----QREL--QERMOSRVGQSGLS----- 362
Db 936 DTRILLKKQDTSRDGVLLREGESERKPVYKELKRESKTKLERLNSALSFKDCQDPAA 995
QY 363 MSAARSEHVESEIIDGLSE-----QENLEK-----QMRQLAVI----- 395
Db 996 VSAGSGRSPSSDVHAGLGLTHGSETQTPKKAIPSPKQPKQLQLENQGEKEVEVK 1055
QY 396 -----PMLYDADQORIKFINW--GLMADPMKYK-----DRQVMNMSFQEKETF 440
Db 1056 NYCPRPEEPAHRAGQKPHGNAEBKLGIDIDHTQSYRQKMEQSRKQRMEMEIATK--- 1112
QY 441 REKFMQHPKNFGLIASFLERKTVAEK-----VLYYLTCKNENY 479
Db 1113 AEKFGSPKD---VDDYERSLVHEVGKPPQVDDSPSKKRTDHDVDFDICTKERNY 1169
QY 480 KS---LVRRSYR-----RRGK-----SQQQQQQQQQQQQQQQQQMPRSSQEEK 520
Db 1170 RSSRQISSEDSERTSCSPSVRHGSHDDDDPRGSPRLSVKSGSPKDEKGLPYENAAVRDD 1229
QY 521 -----DEKEKEKAKEBEK-----PEVEND-----KEDLL 546
Db 1230 PLKCNFYDSGKREQTADTAKIKLSVLNSEGEPSPRWDPMQKDPSPFVSPNSVIKRDLS 1289
QY 547 KEKT--DDTSGE--DNDEKEAVASKRKTAN-----SQGRBKGRITRS 585
Db 1290 RKRSVRDLPEGVEPVSDDSDAEHRSQSPRASSFYDSPRISFLLRDDQKLRERDERLASS 1349
QY 586 MANEANS-----EEAITPQQAELASMEINSSRWTEBEMETAKKGLLEHGNWNSAIAR 639
Db 1350 L--ERNKFYSFALDKTITPDTKALLERAKLSGR--EE-----NWSFL-- 1389
QY 640 MVGSKTVSOCKNPFYFNKKRQNLDE-----ILOQHKLMKE-----RNARR----- 681
Db 1390 ----DWDSRFANPR-NNKQEKVDSAPRPIPSWYMKKKKIRTDSGLADKKQDERREEQ 1444
QY 682 -----KKKAPAAASEEAPPPVVEDEMEASGVSGNEEMVEEA 721
Db 1445 ERQELFASRFLHSSIFEQDSKRLQYLERKSEESDLPPGGLYGQASGEGANSTSDSVOEPV 1504
QY 722 EALHAGNEVPRGECGSPATVNNSSDTEISPSPT-----EAAKTCQNGKPKPATLGAD 776
Db 1505 VLFHSRFMELTMRQKEKEKQKPAEAKQEEEPETHPKTPEPAETKEPEPKAPVAGLP 1564
QY 777 GPPPGGPTP-----PRTSRAPIEPTTASEATGAPT-----PPAPSPS 816

Db 1565 AVTVTVTPEPASFAPEKAEAAEAPSPAGEKPAEPAPVSEETKLVSEBPASVPVEOPROS 1624
QY 817 APPVPVPEKEKETAAAP-----PVEEGEQQKPPAAE 849
Db 1625 DVPPGEDSDQSAAALASAPQESAAATDAVPCVNAEPLTPGTTVSQVSESSVDPKSSPQ 1684
QY 850 ELA-----VDTGKAEPPVSECTE-----EAEQPAKAGKDAEAAEATAGALK 892
Db 1685 PLSKLQRTGEEAEGVEKPEPDTTPTSTEDATQONAGVASEVQPPASEDVEANPPVA---A 1740
QY 893 AEKKEGSGRAITAKSGAPQSDSDSATCSADEVD-----EAE 930
Db 1741 KORTNKSRSKTSVQAAAASVVEKVTTRKSERIDREKLKRSSPRGEAQKLELKEAE 1800
QY 931 -----GGDKNLLSPRPCLLPTGDPANASPOKPLDLKOLKORAAAIPTIOVTK 980
Db 1801 KITRTASKSGGDTEH---PEPFL---PLSRRRNRVSVVATWTDHESRSPAKEPEVQPR 1855
QY 981 VHEPPREDAAPTKAPPAP-----PPQNLQPEDAP---QQGSSPRGKSRSPAPPADK 1032
Db 1856 VTRKRLERELQEAVPPTTPRRGRPPKTRRAAEDGEHEKKEPAETPRPAEGWRSRPSQK 1915
QY 1033 EAFAA-----EAKLPGDPPCWTSGLPFPVPPREVI-KASPHADPPSAFSA 1078
Db 1916 SAAAAGPQGRGNEQKVAEAAEAGAAQASTREGNPKSRGEREAAEPRKDRDPSTDKSG 1975
QY 1079 PGCHPLPLGLHDTARVLPRLPPTISNPPPLISSAKHPSVLERQIGAISQCMSVQLHVPVS 1138
Db 1976 PDTFPV-----EVLERKP---PEKTKSKRGARSTR-----SAMDBAAHQRSL 2016
QY 1139 EHAKAPVGPVTMGLPLPMPDKLAPPSGVKQEQLSP-RQAGPPESLGVPT-----AQEA 1192
Db 2017 EMAARAAGQAA-----DKEAGPAAAPQESQKSGSPQANPNADPDREAE 2068
QY 1193 SVLRGTALSGVPGS-----ITKGIPSTRVPSDSAITYRGSITHTGPADVLVYKCT 1242
Db 2069 SASASTA---PPEGTQLARQIELEQAVONIAKLPEFSAAAS-----KGT 2110
QY 1243 ITRIIGEDSPRLDRGDSLPKGHVITYEGKGHVLSYEGGSMVTOCSKEDG---RSSG 1299
Db 2111 ATATASEBPA-----PEGHKPAHQ---SETLAAAGSIISDASG 2150
QY 1300 PPHETAAP-----KRTY---DMMEGRVGRAISSAIEGLMGRAPPERHS---PHLKBO 1348
Db 2151 EPNFSAAPPSPGSGTHPREGMEPLGHEAESGILETGTATESAPQVSALOPPEGSADT 2210
QY 1349 HHIRGSIQIGIPRSYVEAQEDYLREAKLLKRGTPPPPPSRDLT-----1394
Db 2211 KETRNGSGDSV-----QBAKSGKVEVTPPRKDKGQKTRRRKNANKKVA 2257
QY 1395 -----EAYKQALQKLPKPAHEGLVATVKEAGRSIHEIPREELRHTPELPLAP--- 1443
Db 2258 ITETRASEAQTOSESF-----AAEATAATPEAQEEQK---SEKPPSPAEC 2303
QY 1444 --RPLK-----EGSITQGPPLKYDTGASTGSKKHVRSLSGPGRTFPVPHPLD- 1491
Db 2304 TFDPSKTPPAESLSQENSAAEKTPCK-----APVLPALEPLSQ 2341
QY 1492 -VMADARALACRYEESLKRPGCTASSG-----SIARGAVIYVELGKPPQSP- 1540
Db 2342 PALMDGQOARFKVHGIIESDPVTPPSDGIPTTPIPLTIKLPFPVPIPG-GVPHQSP 2400
QY 1541 -----LTYEDHGAPFAGHLPRGSPVTMRPTPRLQEGSLSS---SKASQDRKLTSTPRE 1591
Db 2401 PKVTEWITQE-----KPAQSTPSPALPNTKASDMDTSSSTLRLKILMDPKY 2448
QY 1592 IAKS-----PHST---VPEHHPIPSPYEHLRGVS-----GVDLVRSHIPLA 1631
Db 2449 VSATGVTSTSVTSIAIEPVSAPCLQAPAPPCDPKHPPLLEGVSAEAAVVPNADTQASEVPVA 2508
QY 1632 FDOTSI PRGILPDAAAAYLPHRLANPTVPHLYPPYLIRGVDPDTAALENRQIINDYIT 1691
Db 2509 ADKEKV---APV-----IAPKIT-----SVISRMVPSIDLENSQKI----- 2541

QY 1692 SQOMHHNTATAMAQADMLRGLSPRESSIALNYAAGPRGIIDLQVPHPLVLPVPTPGTP 1751
Db 2542 -----TLAKPAPQTLTGL-----VSALTGLVNVSLVP-VNALKGPKVGSV 2580
QY 1752 ATAMDRLAYLPTAPOPFSSRSHSSPLSPGCPHTLTKPTTTSSSERERDRDRDRERE 1811
Db 2581 ATLKG-----VGEHPWWAR---DILKGPVNVLTGPNVNLTT----- 2613
QY 1812 KSILSTTTVEHAPIWRP-----GTEQSSGSGSGGGGSSRRPASHSHAHQHSPIISR 1866
Db 2614 -PVSATGVGVNAAP---GPVTAACGVTAITGTAAGTAVTAPAAKGQORASSNENSRFPG 2670
QY 1867 TQDALQQRPSVLHNTCMKGIITAVEPSPKTVLRSTS---TSSPVRPAA---TFPPATHCP 1920
Db 2671 SNSVIDDRPA---DTG-SGAGLRVNTSEGVLSSYGQTEGPQRISAKISQIPPASAMD 2726
QY 1921 LGGTLDGVTPTLMEPVLLPKAPRVARPERPRADTGHAFKAPPAKSGLEBPASSPKGSE 1980
Db 2727 I-----EPQSVSKSQVKADS-----ITPTQSAKPGQ 2754
QY 1981 PRPLVPPVSGHATIAARTPAKNLAPHASDPDPAPPASADPHREKTQSKPFSIQLELRS 2040
Db 2755 TFSAFANVAHSTLVLT-----2771
QY 2041 LGYHSSSYPEGVPEVPVSPSLTHDKGLPKHLEELDKHLEGLRKPQGPVKLGGA 2100
Db 2772 ---AQTYN-----ASPVIS-SVKTRD---PSLEKPEPIHLGSVSTPTVQTGGTVKVLTOG 2817
QY 2101 AHLPHLRPLPESQSSPLLQTAGVKGHQVRVTTLAHISEVIT-----QD 2146
Db 2818 INTTPV--LVNHQLVLT-----SIVTNKKLADPVTLKIETKVLQPANLGPT 2863
QY 2147 YTRHHPOQLSAPLAPLYSFP-GASCP-----VLDIRRPPSDLYLPPPDHGA---RGSP 2198
Db 2864 LTPHPPPALPSKLPDAEVNIVPSGPTPADRTTAHLATPKDTHSPRPTGTPGPPRPCH 2923
QY 2199 HSEGGKRSPEPNKTSVILGG---EDGIEPVSPPEGMTEFGHS-----2237
Db 2924 PSSTTSTALSTNATVMLAAGIPVPOFISSIHPEQSVIMPPHSITQTVSLGHLSSQGEVRMS 2983
QY 2238 -----RSAYVILLYRDGQOTEPFRMGSKSPGNTSOPPAFFKLTESN-- 2279
Db 2984 TPTLPSITYSIRPETHSPRAFLOQIEARAPQVGTQPATTVGPALATQHPPEEVH 3043
QY 2280 -----SAMVSKKQEKINKLNTNRNEPVNISQPCTEIFNMPAITGTGLMYRQOA 2331
Db 3044 YHLPVARAAPVQSEVLVMQSEYRHLPHYTVPR-----DVRIMVHPHTAVSEQPRATEG 3097
QY 2332 VOEHASTNNGLEBARIIRKALMGKYDQWEESPPLSANAFNPLNASASLPAAMPITAADGRSD 2391
Db 3098 VVKVPPANKAPQQLVKEA-----VKTSDAKAVPAPAPVPVPVPT----- 3138
QY 2392 HTLTPSGGGKAKV-SGRPSSRKAKSPAGLASGRPP-----SVSSVHSEGDGNCRRTP 2445
Db 3139 ---PAPPVHGEARILTVTPSSLOQLPL-----TPPVVTVTHGVQIVHSSGELFOERY 3188
QY 2446 TN-RVWEDRPPSAGSTPFYV-NPLIMRLQAGVWAGSPPPPLGSLAGSPLAGP 2494
Db 3189 GDRVTHAPAQQLTHTQFPVASSISLASRTKTSAQVPEGEPELOSTQSAQ 3239

RESULT 11

US-09-864-761-34248
; Sequence 34248, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharron G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; APPLICANT: Chen, Wensheng
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
; ; TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY

	FILE REFERENCE:	Aeomica-X-1	
	CURRENT APPLICATION NUMBER:	US/09/864,761	
	CURRENT FILING DATE:	2001-05-23	
	PRIOR APPLICATION NUMBER:	US 60/180,312	
	PRIOR FILING DATE:	2000-02-04	
	PRIOR APPLICATION NUMBER:	US 60/207,456	
	PRIOR FILING DATE:	2000-05-26	
	PRIOR APPLICATION NUMBER:	US 09/632,366	
	PRIOR FILING DATE:	2000-08-03	
	PRIOR APPLICATION NUMBER:	GB 24263.6	
	PRIOR FILING DATE:	2000-10-04	
	PRIOR APPLICATION NUMBER:	US 60/236,359	
	PRIOR FILING DATE:	2000-09-27	
	PRIOR APPLICATION NUMBER:	PCT/US01/00666	
	PRIOR FILING DATE:	2001-01-30	
	PRIOR APPLICATION NUMBER:	PCT/US01/00667	
	PRIOR FILING DATE:	2001-01-30	
	PRIOR APPLICATION NUMBER:	PCT/US01/00664	
	PRIOR FILING DATE:	2001-01-30	
	PRIOR APPLICATION NUMBER:	PCT/US01/00669	
	PRIOR FILING DATE:	2001-01-30	
	PRIOR APPLICATION NUMBER:	PCT/US01/00665	
	PRIOR FILING DATE:	2001-01-30	
	PRIOR APPLICATION NUMBER:	PCT/US01/00668	
	PRIOR FILING DATE:	2001-01-30	
	PRIOR APPLICATION NUMBER:	PCT/US01/00663	
	PRIOR FILING DATE:	2001-01-30	
	PRIOR APPLICATION NUMBER:	PCT/US01/00662	
	PRIOR FILING DATE:	2001-01-30	
	PRIOR APPLICATION NUMBER:	PCT/US01/00661	
	PRIOR FILING DATE:	2001-01-30	
	PRIOR APPLICATION NUMBER:	PCT/US01/00670	
	PRIOR FILING DATE:	2001-01-30	
	PRIOR APPLICATION NUMBER:	US 60/234,687	
	PRIOR FILING DATE:	2000-09-21	
	PRIOR APPLICATION NUMBER:	US 09/608,408	
	PRIOR FILING DATE:	2000-06-30	
	PRIOR APPLICATION NUMBER:	US 09/774,203	
	PRIOR FILING DATE:	2001-01-29	
	NUMBER OF SEQ ID NOS:	49117	
	SOFTWARE:	Annomax Sequence Listing Engine vers. 1.1	
	SEQ ID NO	34248	
	LENGTH:	2665	
	TYPE:	PRT	
	ORGANISM:	Homo sapiens	
	FEATURE:		
	OTHER INFORMATION:	MAP TO AL034555.2	
	OTHER INFORMATION:	EXPRESSED IN BONE MARROW, SIGNAL = 10	
	OTHER INFORMATION:	EXPRESSED IN PETAL LIVER, SIGNAL = 8.9	
	OTHER INFORMATION:	EXPRESSED IN ADULT LIVER, SIGNAL = 4.8	
	OTHER INFORMATION:	EXPRESSED IN PLACENTA, SIGNAL = 14	
	OTHER INFORMATION:	EXPRESSED IN HEART, SIGNAL = 7.2	
	OTHER INFORMATION:	EXPRESSED IN BRAIN, SIGNAL = 9.5	
	OTHER INFORMATION:	EXPRESSED IN HELA, SIGNAL = 7.1	
	OTHER INFORMATION:	EXPRESSED IN LUNG, SIGNAL = 9.3	
	OTHER INFORMATION:	EXPRESSED IN HBL100, SIGNAL = 7.7	
	OTHER INFORMATION:	EXPRESSED IN BT474, SIGNAL = 12	
	OTHER INFORMATION:	EST HUMAN HIT: AU117052.1 EVALU8 0.00e+00	
	OTHER INFORMATION:	SWISSPROT HIT: P08640, EVALU8 3.00e-10	
	US-09-864-761-34248		
	Query Match	3.9%; Score 518; DB 9; Length 2665;	
	Best Local Similarity	19.3%; Pred: No. 4e-15;	
	Matches	505; Conservative 315; Mismatches 863; Indels 934; Gaps 120;	
Qy	71 EFQGNERSQELHLRPE-----SHSYLPELGKS-----EMEFIESKR---	PRLLELP 114	
Db	525 ERKSGQEKSHVNTBEEKIGIDHTQYRKQMEQRKKQOMETAKSEKFGSKDV--	582	
Qy	115 DPLLRSPLLATCQPAGSEDLTQRSITGKLFPVPSPPPHDTDPLELVPRPRLSKEELIQ	174	
Db	583 DEYERRSLVEVGKP--PDQVTDQ-----SPPSKK-----VKQEQI--	1172	

Db 1498 GV-VAVSPKESPOKEDGLSSQLKSDPVDKPEKEDVSASGSPPEATOLAKOMELQ 1556
QY 1173 -----SPGQAGPESLGVPTAQASVLRGTALGSV----- 1203
Db 1557 AVEHIAKLAESAASAYKADAPEGLA--PEDRDKPAHQASETELAAGIINDISGEPE 1614
QY 1204 -----PGGSITKIGIPSTV-----PSDAITYRGSITHTGTADVLVYKGTI--TRIIGED 1250
Db 1615 NFPAPPYPGESQTDLOPAGAQALQPS-----EGMETDAVSGILETEAATES 1664
QY 1251 S-----PSLDRGREDLSLPGHVIYEGKKGHLSVYEGGMSVTCQSKEDGRSS 1298
Db 1665 SRPPVNA PDSPAGPTDKAAGNSSETSHVPEAKGSK-----EVEVILVRKDKCRQ-- 1716
QY 1299 GPPHETAAKRTYDMMEGRVRAISASIEGLMGRALPERRHSPHLKQHHIRG---SI 1355
Db 1717 -----KTTSRKRKRNKVK-----VAPVESHVP-----ESNOAQGESPA 1752
QY 1356 TOGIPRSYVEAQEDYLRRKAKLLKRGTPPPPPSRDLTEAYKTOALGPLKLPKPAHEGLV 1415
Db 1753 NEGTTVOHPEAQ-----HEKQSEKHPSTPPQCTSDLSKIPSTE----- 1792
QY 1416 ATVKEAGRSIHEIPRELHRT-----PELFLAPRLKEGSIQTGTPKYDTGASTTGSKK 1470
Db 1793 -----NSSQETSVERTPTKASVPPDLPPPPOP-----APVDEEPOA-----R 1830
QY 1471 HDVRSILIGFGRTP--PVHPLDVMADARALERCYEEBSLSKRPGTASSGSGSIARGAPV 1528
Db 1831 FRVHSIESDPVTPPSDPSIPIITLPSV-----TAAKLSPPVASG--- 1870
QY 1529 IVPGLCKPQSP-----LTYEDHGAPFAGHLPGRGSPVMTREPTPRLQEGSLSS---SK 1578
Db 1871 -----GIPQSPPTKVTWITRQ-----EPRAQSTPSPALPPDTKASDVDTIS 1913
QY 1579 ASQDKLSTPREIAKS-----PHSTVPEHPHPISPYEHLLRGVSGVDLYR 1625
Db 1914 SSTLRKILMDPKVVSATSVTSTVTTAIAEPVSAAPCLHEAPPPVD-----SKPLEB 1967
QY 1626 SHIPLAFDPTISIRGPIPLDAAAAYLPHRLAPNPTYPHLYPPVLRGYPDPTAALENQIT 1685
Db 1968 KTAPPVTNNSEIQASEVLVAADKERVAPVIAPKIT-----SVISRMPPVSIIDLENSQKI 2020
QY 1686 INDYITSQQMHNTATAMAQADMLRGLSPRESSLALNTYAAGPRGIIDLSQVPHLPVLVP 1745
Db 2021 -----TLAKPAPQTLTGL-----VSALTGLVNVSLVP-VNALKG 2053
QY 1746 PTPGTPATMDRLAYLPTAPQPFSSRHSSSPLSPGGPHTLTKPTTTSSSERERDRDRD 1805
Db 2054 PVKGSVTLTKSLVS-----TPAGPVNVLKGVP----- 2080
QY 1806 RDREREKSLTSTTVEHAPI-----WRPGTEOSSGS-----SGSS 1841
Db 2081 -----NVLTGPNVNLTPVNAATGVNAAPGTVNAASAVNATASAVTTVAGAVTAAS 2133
QY 1842 GGGGGS-----SSRPASHSHAHQHPISPRTODALQQRPSVLHNTGMGIIT 1888
Db 2134 GGTATGVTMAGAVIAPSTCKQKQASANENSRPHGSPFVIDDRPA---DAG-SGAGL 2189
QY 1889 AVEPSKPTVLRSTS---TSGPVRAA---TFPPATHCPGLGTLDDGVYPTIMEPVLPLPKA 1942
Db 2190 RVNTSEGVLVLSYGQKTEGPQIRISAKISQIPAS-----AMDIEFQGSVSKSQVKPDS 2243
QY 1943 PRVARP--ERPRADTGHAFIA-----KPPARSGLEPASPSKSGSEPRIL--- 1984
Db 2244 VTASQPPSKGFPQAGVAVNATHSTVLTAQTNVNASPVSSVK-ADRPSSL-EKPEPIHLS 2301
QY 1985 -----VPPVSGHATARTPA----- 1999
Db 2302 VSTPVTQGGTKVLTQGINTPVVLVHNLVLTFSIVTNNKLDAPVTLKLTETKVLQPAUL 2361
QY 2000 -KNLAPHASPDPPAPPASADP--HREKTQSPF--STQELRSLGVHSGSYSEGEV 2054

Db 2362 GSTLTTPH-----PPALPSKLTPTVNAHVPSGSPISPADRTVSHLAAAKLDAHSRPSGPGPS 2417
QY 2055 PVSPVSSPSLTHTDKGI-----PKH--LEELDKSHL-- 2082
Db 2418 SPFRASHPSTASTALSTNATVLAAGIPVPOFISIIHPEQSVIMPPIHSITQTVSLSHLS 2477
QY 2083 EGEALRPKPG-----PVKLGGEAAHLPHLRPLPESQSPSSPLLIQTAPGVKGHQVWVTLAQH 2138
Db 2478 QGEVMMNTPTLPSITVSIRPEALHSR-APL---QP-----QQIEVRA-- 2516
QY 2139 ISEVITQDYTRHHPOOLSAPLPAPLYSPFGACSPVLDLRRPDS-----LVLPPPDHCAPAR 2195
Db 2517 -----PORASTPQAP-----AGVPALASQHPPEEVEVHLPVARATAPVQ 2557
QY 2196 GS-----PHSEGKRSPEPNKTSVLGGEGDIEPVSPPEGM 2231
Db 2558 SEVLVWQSYRLUHPYTPRDVRIMVHPHTAVSEQPR-----AADGVKVPFPASKA 2608
QY 2232 TEPGHSRAVAYLLYRDGEQTBPFRMGSKSPGNNTSQP 2268
Db 2609 PQ-----OPGKEAAKTPDAKAAP 2626

RESULT 12

US-10-415-187-5
; Sequence 5, Application US/10415187
; Publication No. US20040044184A1
; GENERAL INFORMATION:
; APPLICANT: BAUGHN, Mariah R.
; APPLICANT: YAO, Monique G.
; APPLICANT: WALIA, Narinder K.
; APPLICANT: GIETZEN, Kimberly J.
; APPLICANT: THANGAVELU, Kavitha
; APPLICANT: LU, Yan
; APPLICANT: DING, Li
; APPLICANT: YUE, Henry
; APPLICANT: TANG, Y. Tom
; APPLICANT: LAL, Preeti G.
; APPLICANT: BATRA, Sajeev
; APPLICANT: LU, Dyang Aina M.
; APPLICANT: SANJANWALA, Madhu S.
; APPLICANT: ARVIZU, Chandra
; APPLICANT: RAMKUMAR, Jayalaxmi
; APPLICANT: GRIFFIN, Jennifer A.
; APPLICANT: GURURAJAN, Rajagopal
; APPLICANT: AZIMZAI, Yalda
; APPLICANT: XU, Yuming
; APPLICANT: BURFORD, Neil
; TITLE OF INVENTION: CYTOSKELETON-ASSOCIATED PROTEINS
; FILE REFERENCE: PF-0828 USN
; CURRENT APPLICATION NUMBER: US/10/415,187
; CURRENT FILING DATE: 2003-04-23
; PRIOR APPLICATION NUMBER: PCT/US01/50983
; PRIOR FILING DATE: 2001-10-26
; PRIOR APPLICATION NUMBER: US 60/244,022
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US 60/247,370
; PRIOR FILING DATE: 2000-11-08
; PRIOR APPLICATION NUMBER: US 60/251,831
; PRIOR FILING DATE: 2000-12-07
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: PERL Program
; SEQ ID NO 5
; LENGTH: 2803
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20040044184A1 5844189CD1
US-10-415-187-5

Query Match 3.7%; Score 485.5; DB 12; Length 2803;
Best Local Similarity 21.3%; Pred. No. 1.3e-13;

APPLICANT: Burgess, Catherine E
TITLE OF INVENTION: PROTEINS, POLYNUCLEOTIDES ENCODING THEM AND METHODS OF
FILE REFERENCE: 21402-245
CURRENT APPLICATION NUMBER: US/10/051,874
CURRENT FILING DATE: 2002-09-25
PRIOR APPLICATION NUMBER: 60/268,595
PRIOR FILING DATE: 2001-02-14
PRIOR APPLICATION NUMBER: 60/325,306
PRIOR FILING DATE: 2001-09-27
PRIOR APPLICATION NUMBER: 60/262,587
PRIOR FILING DATE: 2001-01-18
PRIOR APPLICATION NUMBER: 60/272,409
PRIOR FILING DATE: 2001-02-28
PRIOR APPLICATION NUMBER: 60/262,454
PRIOR FILING DATE: 2001-01-18
PRIOR APPLICATION NUMBER: 60/276,777
PRIOR FILING DATE: 2001-03-16
PRIOR APPLICATION NUMBER: 60/291,672
PRIOR FILING DATE: 2001-05-17
PRIOR APPLICATION NUMBER: 60/330,336
PRIOR FILING DATE: 2001-10-18
PRIOR APPLICATION NUMBER: 60/265,530
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/261,376
PRIOR FILING DATE: 2001-01-16
NUMBER OF SEQ ID NOS: 269
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 56
LENGTH: 4952
TYPE: PRT
ORGANISM: Homo sapiens
US-10-051-874-56

Query Match 3.6%; Score 470.5; DB 15; Length 4952;

Best Local Similarity 20.3%; Pred. No. 1.3e-12;
Matches 558; Conservative 284; Mismatches 891; Indels 1019; Gaps 144;

QY	145	LEPVSPSPHTDPELEVPPLRSKEE-----LIQNDRVDREITWVEQQISKLK	194
DB	981	VKPVAVAP-----ELVPMKVKEPQYFRFEGVWLTETGALLNLTN-----SPLH	1029
QY	195	KKQQQ-----LEBEAA-KPPEPEKVPSPPIESKHSLSVQIYDENRKAEEAHRILEG-	247
DB	1030	KRRQRGRGLPCEAGLEGSEPSDALGDDKDDGLDTELLKGGEGVEHMECEIKLEGP	1089
QY	248	LGPQVELPLYNQPSDTRQHENIKINQAMRKL-----ILYFKRHNHARKQWKQKFC	299
DB	1090	VSPDVE-PGKEETEESK-----RKRKPYRPGIGGFVMVRQKSHTRTK-KGPAA	1136
QY	300	QR-----YDQLMEALEKKVERIENPRRRRAKESKVREYVEKQ	336
DB	1137	QAEVLSDGQDQDEIVADIPAECAVEQSIAEGDEKKQQ-----RGRKRKLEGHFPAY	1191
QY	337	FPEIRKQRELQRMQR-----VGQSGSLMSAARSEHVSIIIDLSEQENLEKQMQ	391
DB	1192	LQEAFFCKELLDSRKALFVAVGVRPSFGLGTPKAG-----DGGSERKELPTS--Q	1241
QY	392	LAVIPMLVDADOQRIK-----FINMGLMADPMKVYKDRQVMNMWSEQEKETFEKFM	445
DB	1242	KGDGPDIADEESRGLGKADTPGPDGGYKASVP-----SDPEK-----	1282
QY	446	QHPKNFGLIASFLERTVACVLYLYLTCKNENYKSLVRRSRRRCKSQOQQOQQOQQOQ	505
DB	1283	PGTPGEMLSDDLDRISTEE-----	1302
QY	506	QOQQQPMRPSQBEKEKEKE-----AKEEEE-----KPEVENDKEDLLK-----	547
DB	1303	-----LPK-MESKDLQOLFVKDVLGSEHGLCGCTPGLEGSRTFLQRFLLQGGPLGN	1354
QY	548	-----EKTDITSG-----EDNDEKEAVASKRKTANSQGRKRGRITRSMANEASEAIT	597
DB	1355	LPSSSPMDSYPGLCQSPFLDSRERGFFSPPEGPEDSPWTSGGTTPSTFT-----T	1406

QY	598	POCSAELASMELNESS--RWTEEE-----METAK-----KGLLEHGRNWSAIARMVG	642
DB	1407	PITTEGEDGLSYNQRSLQRWEDELQSLSTISPLVYANINPNLKDQPDWS-----	1459
QY	643	SKTVSOCKNFYNYKKRONLDEILOHKLKMEKERNARKKKKAPAAASEEAAFPVVED	702
DB	1460	-----SRCKQIMKLWRKVPAAADKAPYLQKAK--DNRAAHRINKVQKQAESQ-----IN	1505
QY	703	BEWEASGVSGNEEEMVEAEALHASNEVPRGECGSPATVNNNSDTESIPSPHTEAAKOT	762
DB	1506	KOTKVGDDIARKTDR-----PALHLRIPPOGALGSPPPA---AAPTIFGSPPTTACLST	1557
QY	763	GQNG-PKPPATLGADGPPPGPPT-----PFRITSRA-----PIEP-----	796
DB	1558	SADGFLKPPA-----GSVGPDSPGELFLKLPQVPAQAPSQDPFGLAPAYPLEPRPPTA	1612
QY	797	-----TPASEATCAPTPPPAPPSPAP-----PPVVPKEEKEEETAAPPVVEGE	841
DB	1613	PPTYPPYPSPTGAPAPQPPMLGASSRPGAGQPGFEHTTTPGTTPRHPQSTPDPFLKP	1667
QY	842	EOKPPAAAEELAVDT-----GKAEPVKSECTEEAEEGPAKGKDAEAEATAEGALKAEK	895
DB	1668	--KCPSELONLAVPESFGVGGGRASBPLLSP-----PPFGESRK-----ALEVKK	1709
QY	896	KEGSGRATTAKSSGAPQ-----DSDSSAT-----CSADEVDEAEAGDKNRLSPRPSLL	945
DB	1710	BEIGA-----SSPSYGPNNLGFVDSFGTHLGGLELKTDPVKAP-----LTPRASQV	1758
QY	946	TPTGDPANASPOKPLDLKQLKORAAAIPPIQVTKVHEPPRED-----AAPTXP	994
DB	1759	EPQ-SPGLGLRQPEP-----PPAQLAPSPSPHPDIFRPGSYTDPYAPQPLT	1804
QY	995	APAPPPPON--LOPESDAPQPGS-----SPRGKSRSPAP---PADKEAFAAEAKQLP	1043
DB	1805	PRQPQPPPPSCCALPPRS-LPSDPFSRVPSVQSQSSQSPITPRPLSBAFC-----	1856
QY	1044	GDPPCWTSLPFPFPPREVIKASPHAPDSAFSAPPGHPL---PLG-LHDTARVPLPR	1099
DB	1857	-----PSPVTPRF-----QSPDPYS--RPPSRQSRDPPAPLH---KPPRPQP	1894
QY	1100	PTISNPPPLISAKHPSVLERQIGAISQMSVOLHV-PYSE-HAKAPVG-----PVT	1149
DB	1895	PSV-----AFKAGSLAHTSLGA--GGFPAALPAGPAGELHAKVPSPQPNFVRSPGT	1944
QY	1150	-----MGLPLPM-----DPKKLAPFSGVKQEQSLP-----RGQAGPPESLGVPTAQEAS	1193
DB	1945	GAFVGTSPSMRTTFFQAVGEPSSLKP---VPQGLPPPHGINSHPGFGFTLKGQSTNYT	2001
QY	1194	VL-----RGTALGVPGGS-ITKGIPSTRVPS-----DSAITYRGSITHTGPADVLY	1239
DB	2002	VATGNFHPSPGSLPSSSGSTGESYGLPLRPPSVLPPLPPADGSLPY---LSHGASQ--R	2055
QY	1240	KGTITRIIGEDSPRLDRGREDSLPKGHVYIGKKGHVLSYEGGMSVTOCKED-----	1293
DB	2056	SGITSPVEKREDPG---TGMGSLATAEL--PQTQDPGMS---GLSQTELEKQQRQLR	2107
QY	1294	-----GRSSGPPHETAAPKRTYDMMEGRVGRAISSASIE-----G	1329
DB	2108	ELLIRQOIQRNTRLOREKETATAAAGAVGPPGSGWGAEPSPAPFQLSRGOTPFAGTQDKSS	2167
QY	1330	LMGRAIIPPERHSPHLKEQHIRGSIITQIGIPSYVEAQDYLRREAKLLKREGTTPPPP--	1387
DB	2168	LVG--LPPSK-----LSGPILG--PGSF--PSDRLSR-----PPPAT	2200
QY	1388	PPSRDL-----TEANYTQA--LGPLKLKPAHEGL-----VATVKEAGRSIH--EI	1428
DB	2201	PSSMDVNSRLVGGSAFYQAFYRPFYPSGLPQQOQQOQQOQQOQOQOQOQOQOQOQOQOQ	2260
QY	1429	PREEL-RHTPELPLA-----PRPLKEGSIITGTPLKYDTGASTTSGKKHDVRSLLGSPG	1481
DB	2261	PGPELQROALGSLAGISTRLPGP-----GEPVGPAGPAQFTELHNVQKGLGPGG	2312

Db 1283 PGTGSGMLSSDLDRISTEE----- 1302
QY 506 QOQQQWPRASSQBEKDEKEKE-----AEKEEE-----KPEVNDKEDLLK----- 547
Db 1303 -----LPK--MESKDLQQLFKDVLGSEREHLCGCTPGLEGSRTPLORPFLQGLPLGN 1354
QY 548 -----EXTDITSG-----ENDSKEAVASKRKTANSQGRKRITRSMANEANSBEAIT 597
Db 1355 LPSSSPWDSYGLCQSPFLDSRERGFFSPPEGPDPSPWTGSGTTPSTPT-----T 1406
QY 598 PQSASLAWELNESS--RWTEEE-----METAK-----XGILLEHGNWSAIARMVG 642
Db 1407 PTTEGEGDGLSYNORSLQREWEDEELCOLSTISPLVYANINPNLKQDYPDMS----- 1459
QY 643 SKTVSOCKNFYFNKKRONLDELLOQHKLMEKERNARKKKKAPAAAEAEAPPPVVED 702
Db 1460 -----SRCKQIMKURKVPADKAPYLOKAK--DNRAHRINKVQKQESQ-----IN 1505
QY 703 BEMASGVSGNEBEMVEEAEALHASGNEVPRGCSGPATVNNSSDTSIPSPHTEAAKDT 762
Db 1506 KQTKVGDIAKTRD-----PALHLRTPPQPCALGSPPPA--AAPTFIGSPPTPAGLST 1557
QY 763 QONG-KPPPATLGADGPPGPPPT-----PPRRTSRA-----PIEP----- 796
Db 1558 SAGDGLFKPPA-----GSVPGDPDSGELFLKLPQVPAQAPSQDPQGLAPAYPLEPRFPTA 1612
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QY 842 EQKPPAAEELAVDT-----GKAEEPVKSECTEABEGPAGKXDAABAEATAEGALKAEK 895
Db 1668 --RCPSLDNLAVPESPGVGGKASEPLLS-----PPFGESRK-----ALEVKK 1709
QY 896 KEGSGRAITAKSSGAPO-----DSDSAT-----CSAEVDEAEAGDKNRLLSRPSLL 945
Db 1710 EELGA-----SSPYGPNLGFVDSPPSGTHLGLLELKTDPVFKAP-----LTPRASQV 1758
QY 946 TPTGDPANASPOKPLDLKQLKQRAAAIPIQVTKVHEPRPD-----AAPTKP 994
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QY 1044 GDPPCWTSGLPFPVPREVIKASPHADPSAFSAPGCHPL-----PLG-LHDTARVLP 1099
Db 1857 -----PSVTPRF-----QSPDPYS-----RPPSRPQSRDPFAPLH---KPPRPQP 1894
QY 1100 PTISNPPPLISSAKHPSVLEROIGATISQGMVOLHV-PYSE-HAKAPVG-----PVT 1149
Db 1895 PEV-----AFKASLAITSIGA--GGPAPALPAGPAGELHAKVPSGQPPNFVRSPT 1944
QY 1150 ---MGLPLPM-----DPKKLAPFSGVKQBLSP-----RQAGPESLGVPTAQEAS 1193
Db 1945 GAFVGTPSPMRFTPQAVGEPSLKPP---VPQGLPPPHGINSFGPGTILGKPGQSTNYT 2001
QY 1194 VL-----RTALGSPVPGS--IKYKTPSTRVPS-----DSAITVRGSIHTHTPADVLY 1239
Db 2002 VATGNFHPSGPLGSPSGSTGESYGLSLRPPSVLPPPPADGSLPY---LSHGASQ---R 2055
QY 1240 KGITRIIGSDPSRLDRGREDLSLPGKHVIYEGKGHVLSEYEGMSVTCQSKED----- 1293
Db 2056 SGITSVPEKREDG---TGMGSSLATAEL---PGTQDPGMS---GLSQTELEKORQORLR 2107
QY 1294 -----GRSSSGPPHETAAPKRTYDMMEGRVGRATISSASIE-----G 1329
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QY 1330 LMGRAPPERHSHLKEQHIIHGSIQGI PRSVVEAQEDYILREAKLLKREGTTPPP-- 1387
Db 2168 LVG--LPFSK-----LSGPILG--PGSF--PSDDRLSR-----PPPPAT 2200

QY 1388 PPSRDL-----TEAYKTOA--LGPLKLPKAHREGL-----VATVKEAGRSIH--EI 1428
Db 2201 PSMDVNSRQLVGGSAFYQAPYPCSLPQOQQOQWQQQAATAATSMRFAMSAFPST 2260
QY 1429 PREEL-RHTPELPLA-----PRPLKEGSIOTGTPLYKYDTGASTTCSKKHDVRSLLGSG 1481
Db 2261 PQPELGRQALGFLAGISTRLFCP-----GEVPGPAGPAQFTELHNNYKQGLGPGG 2312
QY 1482 RTFPPVHPLVDNADARALERACYEESLKSRRPGTASSGGSGSIARGAPVIVPELKGKRPQSP 1541
Db 2313 TFFP-----CGGPP-----QRPRFYV 2329
QY 1542 TYEDHGAPPAGHLPRGSPVTMREPTPRLOEGSLSSSKASQDRKLTSTPREIAKSPHSTVP 1601
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QY 1602 EHHHPHISP-----YEHLLRGVGVULYRSHIPLADPDTISIIRGIP-----LDAAYYL 1651
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QY 1652 PRHLAPNTPHLL-YPYLYIRGVDPDAALENROT----- 1684
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Db 2516 -PEERPP-PAADASEPRLASVLPEVKPVEGGRHPS-----PCQFT----- 2555
QY 1798 RDRDRDRDREREKILSTTTTVEHAPI-----WRPG-----TEQSGSGSGSG 1842
Db 2556 -----IATKVEPAPAAANSGLGLKFCQSGMWSGRDTRMGTGPFSSSG 2597
QY 1843 -----GGGSSSRPASHSHAHQSPISPRTOALQORPSVLHNTGMKGIITAVEPSKPTV 1897
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QY 1898 LRSTSTSPVRPAAATPPATHCPGLGTLGVVPTLMNEPVLPLKEAPRVARP--ERPRADT 1955
Db 2635 LESGALTLPFGPAAS-----GDELD-----KMESLVASELPLLIJEDLLEHKKKE- 2679
QY 1956 GHAFKAPPARSGLEPASSPSKSGSEPRPLVPVSGHATITARTPAKNLAPHASDPDPAPP 2015
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Db 2713 QAMSLPHEGSSPSLAGSQOQL---SLGL-AVARQPGLPQPLMPTQPPAHALQORLAPSWA 2768
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Db 2769 MVSNOGHMLSGQ-----HGGQAG---LVPOQSSQPVLSQKPMGTMPSPCMCKPQ 2814
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QY 2179 -----PPSDIYLPFPDHPAGFARGSPHSEGGKRSPEPNKTSVLGGGEDGIEFVSP 2227
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; APPLICANT: Gout, Ivan
; APPLICANT: Stockert, Elisabeth
; APPLICANT: Gure, Ali
; APPLICANT: Chen, Yao-Tseeng
; APPLICANT: Old, Lloyd
; TITLE OF INVENTION: Breast Cancer Antigens
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; SEQ ID NO 50
; LENGTH: 2971
; TYPE: PRT
; ORGANISM: Homo sapiens
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Query Match 3.4%; Score 452; DB 14; Length 2971;
Best Local Similarity 19.0%; Pred. No. 4.9e-12;
Matches 587; Conservative 296; Mismatches 1107; Indels 1092; Gaps 130;

Qy 71 EFQPGHNSQE----LHLRPESHSLPELGKSEMERI--ESKRPRLLELPD--PLLRPSP 122
Db 91 DFQFQDEDEDDDEETIEVEEQQSGNDAEAQRREIELLRREGELPLBELRLSLPPQLLEGP 150
Qy 123 LLATGQAPAGSEDLTKORSITGKLEPVSPSPPHPTDPELELVPPR---LSKEELIQNMDRV 179
Db 151 SSPSQTPSSHSDTRDGPERGAE---EPPQV---LEIKPPPSAVTQRNKPQHPHDED 202
Qy 180 DRITVWEQIQSKL---KKQQLEREAAKPPPEKVPSPPPPIESKHSRLVQIYY----- 231
Db 203 DEEFTANEAEAEDEDTIAAEQLEGEVDHAMBLSLAREGEL-----SMEELLQOYAGA 257
Qy 232 -----DENKKAEAAHRIIEGLGP-QVELPLYNQPSDTRQYHENIKINQAMKKLI 281
Db 258 YAPGSSGSEDEDEVDANSDCDEPGVZAEF---PQEDSSSQSDSVE----- 304
Qy 282 LYFKRRNHARKQKQFCORYDQLMLEALEKKVRIENNNRRRAKESKVREYYEKQFPEIR 341
Db 305 -----DRSEDEDEHSEEEETSGSSASESESESESEDAQSQSOA 343
Qy 342 KQRE-----LQERMQSRVQORGSGLSMAAARSEHVSFIIDGLSEQENLEKQMRQ 391
Db 344 DEEEEDDDFGVEYLLARDEEQSEADAGSGPPTGPTTLGPKKEITDIAAAASLQPKGYT 403
Qy 392 LAVIP-----PMLVDADQQRKEI-----NNNGLMADPMKYKDRQVMNM---- 431
Db 404 LATQVKTPIPLLRLQRLRYQHIGLDWLVTMYEKKLNGILADEMGLGKTIQIISLAHL 463
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Qy 432 -----WS-----EQKETPREKFMQHPKNFGLIASFLERKTVAE----- 465
Db 464 ACEKGNWGPHLIIVPTSVMLNWMELKRCWCPSF---KILTYGAKERKLRQGWTKFN 519
Qy 466 -----CVLYYYLT-----KKNENYKSLVRSSYRRRGSKSQOQQOQQOQQOQQOQ----- 507
Db 520 AFHVCITSYKVLQDHQAFRRKNWYLIILDEAQNKFNKFSQRWQSLNFNSSORLLLTGT 579
Qy 508 -----QQQPMPRSSQEEDEKE-----KEKEAEKEEE-----KP- 536
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Qy 537 -----EVENKEDLLKEKTD-----DTSGEDNDEKEAVASKRKTANSQGR 578
Db 640 LLRRVKVDVEKQMPKKYEHVIRCLSKRQRCLYDFMAQTTKETLAT-----GHF 690
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Qy 746 ----SDTESIPSPHTE-AAKDTGQNGPKP---PATIGADGPPGPP-TPPRTSRA 792
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Qy 793 PIEPTPASEATGATP-----PPAP-----PSPSAPPVPVPKKEEKEETAAPVVE 838
Db 877 PLQPNSGSLPQVLPSPGLVSGTSPRPPTLSLKPTTPAPVRLSP-----APPG 936
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Qy 951 ----PRANASQKPLIDLK-----OLKQ-----RAAAIPIPIQVTK-----V 981
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Db 1115 LKLHVSPPEVSA-----PGAAPL-TISSPLHVPSSLPGPASSPMIPNSPLASPV 1168
Qy 1073 SAFSYAPPGHPLGLGHDHTARPVLPRPPTISNPPPLISSAKHPSVILEROIGAISQGMVQ 1132
Db 1169 SSTVSPLSSSLPISVPTTLPAASAPLTIPIASPLTVSASGALL----- 1214
Qy 1133 LHVPSYEHAKAPVGPVTMGLPLPMDPKKLAPSGVQEQQLSPRQOAGPPES---LGVPTA 1189
Db 1215 -----TSVTPPLAPVVPAAAGP-----PSLQPSG-ASPASALTGLATA 1253
Qy 1190 Q-EASVLRGTLGSVPGGSITKGIPISTRVPSDSAITYRGSI THG----- 1232
Db 1254 PLSUSSQTQCHPLLLAPTSSHVPLGNSVTAPACSPVLVPASALASFPSPAPNAPQAASL 1313
Qy 1233 -TPADVLYKGTITRIIGEDSPRLDRGDSLPKGVHVIY----EGKKGHVLSVEGMSVT 1287
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QY 1341 SPHLKEQHIRGISTOGIPRSVVEAQEDYLRREKLLKREGTPPPPPPSRDLTEAYKTQ 1400
Db 1432 -----LGGS-----SPQTLISLGTGNPQGFPTQTLS----- 1458
QY 1401 ALGPLKLKPAHEGLVATVKAAGRSIHIEPRELHRHTPELPLAPR-PLKEGSIITQGTPLKY 1459
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QY 1460 DTGASITGSKK---HDSRLISGPGTFFPVHPLDMDARALERACYEESLSKSPGTA 1515
Db 1509 LTLAPASSASLAPASVQTLTSPA-----PVPTLGPAQAQTLALAPASTOSPASQA 1561
QY 1516 SSGGSIARCAPVIV-----PELGKPRQSPLTYEDHGAPPAGHLPRGSPVTMR 1563
Db 1562 SSLVNSAGAPLPVMTWSRLPVSKDEPDTILRSGLPPSPSTATSGGPRPRQP----- 1617
QY 1564 EPTPR-----LQE-----GSLSSKASQDRKLTSTPREIAK-- 1594
Db 1618 PPPSPFYLDLSLEKKRKQRSELERIFOLSEAHGALAPVYGTVELDFCTLPQPVASPI 1677
QY 1595 SPSTVPEH-----HPHISPYEHLRLGVSVDLYRSHIPLAFDPTSTIPRGIPLD 1644
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QY 1645 AAAAYLPRHAP-----NPTYPHLYPPVLI-----RGVPO-----TA 1677
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QY 1678 ALENRQ-----TIINDYITSO---QMHNTATAMAQRAADMLRG----- 1712
Db 1790 AVLLRQLKASGRVLIPTQMTMLDVLQFLTYGHLYLRDGSSTRVEQRAQALMERFNAD 1849
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Db 1850 KRIFCTILSTRSGGVNLTGADTVFYDSW-----NPTMDAQADRCRHRIGQTR 1900
QY 1758 -----LAVLPTA-----POPFSSRHS 1773
Db 1901 DVHIYRLISERTVEENILKANOKRMGLDMAIEGNETTAYFKQOTIRELFDMPLEBPSS 1960
QY 1774 SS-PLSP-----GGPHTLTKPTTSSSERDR----- 1800
Db 1961 SSVPSAPEEETVASKQHILEQALCRAEDEDIRATQAKAEQVAELAEFNENDGFPA 2020
QY 1801 -----DRDRDREREKSIITSTTVEH----- 1823
Db 2021 GEGEAGRPGAEDEMSRAEQEIAALVEQLTIERYAMKFLASLEVSREELKQAEQV 2080
QY 1824 -----APIWR-PCTEQSSSG--SSGGGSSSRPASHSHAHQH--SPISPT 1867
Db 2081 EAARKDLQAKEVFRUPOEEBEGPGAGDESSCTGGGTHRRKKAKAPERGTRVSERL 2140
QY 1868 QDALQORPSVLHNTGMGIITAVEPSKPTVLRSTST---SSVPRPAATFPFATHCPLGGT 1924
Db 2141 RGAETQGANHTP-----VISAHQ-----TRSTTTPRCSPARERVPRAPRPTPAS 2190
QY 1925 LDGYPTLMEPVLLPKBAPVARPERPRADTGHAFLAKPPARGLEPASPSKSGEPRL 1984
Db 2191 APAIPAAL---VPVPSAPVPIAPNPTITLPHILSPPPPPSPQIPPCSSPA--CTPPPA 2245
QY 1985 VPPVSGHATTARTPAKNLAPHASP---DPPAPPASAS-----DPHREKTSQKFFSI 2033
Db 2246 CTPPPAHTP---PPAQTCLVTPSSPLGLLGPSPVISATNPLGLRPEALCAQALASP 2302
QY 2034 QLELRLSLGVHGS---YSPGVEPVY---PV-----SSPSLTHDKG-LPKHLE 2075
Db 2303 ESLELASVASETSSLSLVPKOLLPVAVILPVSEKNLSLTSPASPLTLEASIFNGQE 2362
QY 2076 ELDKSHLEGLRPKQPGFVLGGGAHLP-----HLRPLPESQPSSSPLLQTAGVKGH 2129

Db 2363 QEAPDPAEGTTLTVLP-----EGEELPLCVSENGLELPPSPAASDEPLEQLEADR-- 2413
QY 2130 QRVVTLAQHISEVITQDYTRHHPQOL-SAPLPAPLYFFPCASCVDLDRRPPSDLYLPPP 2188
Db 2414 -----TSEELTEAKTPTSSPEKPOELVTAEVAAPSTSSSATSP----- 2452
QY 2189 DHGAPARGSPHSEGGKRSPEPNKTSVLGGEDGIEPVSPPEGMTPECHSRSAVYPLLYRD 2248
Db 2453 -----EGPSPARPPR-----RRT 2465
QY 2249 GEOTEPSRMGSKSPGNTSOPPA--PFSKLTESNSAMVSKKQBINKKLNTNHRNEPEYNI 2306
Db 2466 SADVERIGQGTGRPG--OPPGKVLRLKPLGRLVTVVEEKELVQRR-- 2509
QY 2307 SQPGBTFINMPTITGLMTYRSQAVQEHASTNMGLAIIRKALMGKYQOWEESPPLS-- 2364
Db 2510 QQRGAASTLVPVGVSET-----SASPGSPSV--RMSGP-----ESSPPIGGP 2549
QY 2365 -----ANAFNPLNASASLPAAMP--ITAADGRSDHILT 2395
Db 2550 CEAPSSSLPTPQQPFIAARRHIELGVTGGSPENGDGALLAITPPAVKRRRGRPKKNR 2609
QY 2396 SPGGGKAKVSGRPPSRKAKS-----PARG-----LASGDRPPSVSVHSEG 2437
Db 2610 SPADARGVDEAPSTLKGKTNGADVPVGPETLIVADPVLQPLIPQPLGQPQVH-- 2666
QY 2438 DCMNRTPLTNRWME---DRPSSAGSTPPFPYVPLMLRLQAGVMA-- 2485
Db 2667 ---RPNPLSPVKEKRRGRPPKARDLPIP-----GTISSAGDGNSESRTQPPPH 2713
QY 2486 AGSGPLAGPHAWDEPKPLLC 2507
Db 2714 SPLTPL-----PPLLV 2725

RESULT 20

US-10-051-874-166
; Sequence 166, Application US/10051874
; Publication No. US20040005557A1

GENERAL INFORMATION:

; APPLICANT: Padigar, Muralidhara
; APPLICANT: Alsbrook II, John P
; APPLICANT: Colman, Steven D
; APPLICANT: Spytek, Kimberly A
; APPLICANT: Boldog, Ferenc
; APPLICANT: Vernet, Corine AM
; APPLICANT: Li, Li
; APPLICANT: Shenoy, Suresh G
; APPLICANT: Casman, Stacie J
; APPLICANT: Guo, Xiaojia Sasha
; APPLICANT: Edinger, Shlomit R
; APPLICANT: MacDougall, John R
; APPLICANT: Malyankar, Uriel M
; APPLICANT: Patturajan, Meera
; APPLICANT: Shimkets, Richard A
; APPLICANT: Pena, Carol EA
; APPLICANT: Tchernev, Velizar T
; APPLICANT: Zerhusen, Bryan D
; APPLICANT: Millet, Isabelle
; APPLICANT: Miller, Charles E
; APPLICANT: Lepley, Denise M
; APPLICANT: Smithson, Glenna
; APPLICANT: Baumgartner, Jason C
; APPLICANT: Herrman, John L
; APPLICANT: Peyman, John A
; APPLICANT: Gorman, Linda
; APPLICANT: Mezes, Peter D
; APPLICANT: Kekuda, Ramesh
; APPLICANT: Taupier Jr, Raymond J
; APPLICANT: Gerlach, Valerie
; APPLICANT: Grosche, William M
; APPLICANT: Liu, Xiaohong
; APPLICANT: Ellerman, Karen

Db 399 -----CAVPAKAST-----GTTTAAAPQOPV-----PKAAPVTTPSPQAVPR-- 435
QY 1178 AGPPESLGVPTAQEASVLRGTALGVSPGGSITKIGIPSTR-VPSDSAITYKRGSTHTGTPAD 1236
Db 436 -----ATAAAPV-----TPQPVTKAATTTNATPPQIPKAAATTTATPV- 478
QY 1237 VLYKGTITRIIGDSFSLDRGREDSLPKGHVIEYKKGHVLSYEGGMSVTCOSKEDGERS 1296
Db 479 -----TP-----QQPIPKA-----GTD 490
QY 1297 SSCOPPHETAAPKTYDMWEGRUGRAISSASIEGLMGRATPPERHSPHHLKEQHHRIGSIT 1356
Db 491 AAPP-----AVPKAPSD-----GRAATP-----509
QY 1357 QGIPRSVQAQEDYLREAKLLKREGTTPPPPPPSRDLTEAYKTQALGPLKPKAHEGLVA 1416
Db 510 -GVFNATDPQK-----PPPTPOS-----527
QY 1417 TVKEAGRSIHEIPREBLRHTPELAPRPLKEGSITQGT-----LKYDTGTASTTGSKKHDV 1473
Db 528 -----VPSAVTEPKPQAPRAAPPSPNEATPAVPSPNLK-----561
QY 1474 RSLIGSGRTFPVPHLDVADARALERACYEESLSRPGCTASSCGSARGAPVIVPEL 1533
Db 562 -----SPLPTIP--KEVPLMA-----LTPQPVTAQ-----MVTOL 589
QY 1534 GKPRQSLTYVEDHGAFFAGHLPRGSPVTMEPTRLQEGSLSSKASQDRKLTSTPREIA 1593
Db 590 AATKPSFI-----VPKASPKALMTTPPP--PGULPRAAAKLLGLPSP--VA 634
QY 1594 KSPHSTVPEHHPHPIIPYEHLLRGVSDLYRSHIPLAFDPTSIPIRGIPLDAAAAYLPR 1653
Db 635 SAMHAKVTP-RPLPASP-----VPMMAASPASLGP-----DAARV-----667
QY 1654 HLAAPNTYPHYPPYILIRGYDPTAALENQTIINDYITSQMHNTATATAQRAADMLRGL 1713
Db 668 ALATNAASPCAKP-----EAGGNGTLMAPMG-----694
QY 1714 SPRESSIALNYAAGRGIIDLSOVHPLVL---VPPTGPTATAMDRLAYLPTAPQFSS 1770
Db 695 -----AANTQWAPIGAGAAQTAPWGAANTHVSMPGAGGATQ-----SPTGAAN 739
QY 1771 RHSSPLSGPGTHLTKPTTSSSERDRDRDREREKSIILTSITTTTVEHAPIWRFC 1830
Db 740 TH-MSPIGAGATQMS-PWGAANTQMS-----MGATTTQMSPWGAAA 780
QY 1831 TEQSSSSSSSGGGSSSSPASHAHQHSIPSPRTQDALQORPSVLHNTGMKGIITAV 1890
Db 781 TTQPSPM-----GAAATQVATAGNTMQVSPMGAATP---PQTPSV-----GAATTP 825
QY 1891 EPSKPTVLRSTSSVVRPAATFPFATHCPLGTLGVVPTLMEPVLLPKAPRVARPER 1950
Db 826 QPS--PWGAATLMSPMGAATTPQPS---PMGAV-----TTQPP---PWAATNTTQPPP 871
QY 1951 PRADT-----GHAFILAKPPARSGLPSPASSKSGSEPRPLVPPVSGHATARTPAKNLAP 2004
Db 872 MAASTQSTPMGAATTTQSPMGATTTQSPMGASTPQ--APP-----TVAGSP-----918
QY 2005 HHASPDPPAPPASDPHREKTSQKFSQELSLRSLGVHSGSSYSEGEVPEVSPVSPSL 2064
Db 919 ---TPPPPIPPSPTA-----QTSFQMS-----KSPFPDP-- 945
QY 2065 THDKGLPKHLELDKSHLEGELAPKQGPVKVLGGEAAHPLRPLPESQSPSSPLLQTAP 2124
Db 946 -----PKAPSAQAOTSPAHHVAN-----ASP 966
QY 2125 GVKGHORVVTLAGHISEVITQDYTRHHHPQOLSAPLPAPLYSFPFGASCPVLDLRPPPSDLY 2184
Db 967 GV-----TAVSPAPI-----976
QY 2185 LPPPDHAGAPGSPHSGKRSPEPNKTSVLGGEGDIEPVSPPEG---MTERCHRSVAV 2241
Db 977 -----GVTEASPSADGARLSFGPTAAT-----DG---PKASPAATADVTEAATDVTA 1021

QY 2242 YFLLYRDGEQTEBPSRMGSKSPGNTSQPPAFFSKLTESNAMYKSKQEIKNKLNTHRNE 2301
Db 1022 ATAVPAEAAPTAKRSSSSSSSSSS-----SSSSSSSSSSSSSSSDSSSSSSSPAS 1075
QY 2302 PEYNISQPGTEIPNMPAITGTGLMTYRSQAVOEHAHSTNMGLEAIRKALMGKYDQWERSP 2361
Db 1076 P-----APAVG-----DGOQWMT 1088
QY 2362 PLSANAFNPLNASASLPAAMPITAAADGRSDHTLTSPPGGGKAKVGRPSRRKAKSPAPGL 2421
Db 1089 PGAQOSVPPVTEAAVQVEAAAAAAG-----AEREGPRTTKRKRTRKSSS 1134
QY 2422 ASGDRPPSVSVSHS 2435
Db 1135 SSSSSSSSSSSSSS 1148

RESULT 22
US-09-738-973-425
; Sequence 425, Application US/09738973
; Patent No. US20020110563A1
; GENERAL INFORMATION:
; APPLICANT: Reed, Steven G.
; APPLICANT: Henderson, Robert A.
; APPLICANT: Lodes, Michael J.
; APPLICANT: Fling, Steven P.
; APPLICANT: Mohamath, Raodoh
; APPLICANT: Algate, Paul A.
; APPLICANT: Secrist, Heather
; APPLICANT: Indirias, Carol Yoseph
; APPLICANT: Benson, Darin R.
; APPLICANT: Elliot, Mark
; APPLICANT: Mannion, Jane
; APPLICANT: Kalos, Michael D.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
; TITLE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CANCER
; FILE REFERENCE: 210121.475C9
; CURRENT APPLICATION NUMBER: US/09/738,973
; CURRENT FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 587
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 425
; LENGTH: 4019
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-738-973-425

Query Match 3.3%; Score 436; DB 9; Length 4019;
Best Local Similarity 18.3%; Pred. No. 3.8e-11;
Matches 555; Conservative 314; Mismatches 1010; Indels 1152; Gaps 142;

QY 34 HTDVGLLEYQHHSRDYASHLSFGSIQOP---QRRPSLLSEFPQGNERSQELHLRSHS 90
Db 513 HSDIGPVT-----DPSSLQPNVNOSSRP--LSEELQDGLSPELDKMTDGA 559
QY 91 YL-----PELGKSEMEFTESKRPLELLPDLRLPSPLATCQAPGSEDLTKDRSLTGK 144
Db 560 ILGLKYKIFELGKQVEDL-----FTAVLSPANT-----588
QY 145 LEPVSPSPPHTDPELELVPPRLSKEELIQNDMDRVDRITWVEQQISKLKKQQLLEEA 204
Db 589 -QPTPLPQPP---PPTQLLP-----IHNQDAFSR-MPLMNGLI-----G 622
QY 205 AKPPEPEKVPSPPTESKRSILVQIYDENRKAHAHRLLEGGLGQVQLPLYNQPSDTR 264
Db 623 SSFPLPHNSLPPCGSLGTFSATQSSYPDARDKNSAFN-----PMASDPNNS-- 669
QY 265 QYHENIKINQAMRKKLILYFKRRNHARKQWKQFCQRYDQLMLEALEKKYVERIENPRRA 324
Db 670 -----WTSS-----APTVEG-ENDTMSNA 697
QY 325 KESKREYIEKQFPEIRKQRELOERMQSRVQSGLSMSAARSEHEVSEIIDGLSEQEN 384

Db 688 ORSTLK--WEB- 696
QY 385 LEKOMROLAVIPMLYDADOOORIKFINMGLMADPMKVYKIDROVMNMWSEKETREKF 444
Db 697 -EALGEMATVAVLY--TNINPNLKEFPD--WTRVQIAKLWRK- 739
QY 445 MQHPKXNGLIASFLERTKVAECVLYYYLTKKENYKSLVRSYRRRGKSQOQOQOQOQ 504
Db 740 -----ASSQERAP-----YVQKARDN-----RAALRINKVQMSNDMKRQ 775
QY 505 QOQOQOQMPRSSQEKDEKEKEAEKEBEKEPEVENDKEDLLKTKDDTSGEDNDEKAV 564
Db 776 QODSIDPSSIDSELFDPLOKRESEHEQ- 805
QY 565 ASKGRKTANQGRKGRI--TRSMANEANSEEAITPOOSAEALSMELNESSRTEEMET 622
Db 806 -WFRQOMRQKSQQAIEATQKLEQVNEQO--QOQOQOQSGHL-----LVQSGSDT 856
QY 623 AKKGLLEHGRNWSAIAIRMVGSKTVSQCKNFYFNKKRQNLDEILQOHLKWKERNARRK 682
Db 857 PSSGI-----QSPLTPQCGNMGNSPAQSF-----HKELFTKQ----- 888
QY 683 KKAPAAAASEAFAF-----PPV-----VEDEMEASGVSGNEEMWEEAEALHASGN 729
Db 889 PPSTPTSTSSDDVFKPQAPPPPPAPPSRIPIODLSQA----- 926
QY 730 EVPRGECGPATVNNSSDTSIPSPHTEAAKDTGQNGPKPATLIGADPPPGPTPB-- 786
Db 927 -----QTSQPPSPQVFS-----PGSSNSRPPSPMDPYAKWVGTPRPPVPG 966
QY 787 -----RRTSRAPIBP-TPASEA-----TCAPTTPPAPP-----SPSPAPPPVVPK 824
Db 967 HSFSRRNSAAPVENCITPLSSVSRPLQWNETTANRPSVPRDLCSSITTNDNPYAKPDP- 1025
QY 825 EEKEEETAAAPVEEGEQPPAAELAVDTGKAEBPVKSECTEEAEAGKAKDAEAAE 884
Db 1026 -----RPVMTDQPKSLGLSRSPVWSEQT-----AKG-----PIAA 1056
QY 885 ATAEGALKAEKGGSGRATTAKSSGAPOQSDSSATCSADEVEAEGDKNRLSRRPSL 944
Db 1057 GTSDDHFTKP-----SPRADVFORQIP-DSYARPLLTAPLDGPGPFKTP--MQPPSS 1108
QY 945 LTPTGDPANASPOKPLDLKQKORAAAIPPIQVTKVHEPPREDAAPTKPAAPPAPPPQN 1004
Db 1109 QDPYGSV-SQASRRLSD-----PYERALTFRPIDNFHNSQNDPYSQPLTHPAVNES 1163
QY 1005 LQESDAPQOQSGSPGRKS-----SPAPPADKEAFAAEAKLPGDPPCWTSGLPFP 1056
Db 1164 FAHPSRAFSQGTISRTPSQDPYSPQPPGTPRPVVDYSQSGTARSNTDPYSQPPGTPRP 1223
QY 1057 --VPPREVIKASHPAPPSAFS-----YA-PPGHPLP-LGLHDTARVLP 1097
Db 1224 TTVDDP--YSQQPQTPRSTQTDLFVTPVNRHSDPYAHPGTPRFGISVPYSQPPATP 1280
QY 1098 RP-----PTI-SNPPPLISSAXH-----PSVLEROIGALSQGMVOLHPVYS 1138
Db 1281 RPRISEGFTSRMTFRVLMFNQDPFLQAAQNRGPALEGLVRPDPDTCQ----- 1329
QY 1139 EHAKAPGVPTMGL-----PLPMDPKKLAPSGVVKQ-----EQLSR 1175
Db 1330 --TPRPPGP--GLSDTSFRVSPSAARDPYDQSPMTPRSQSDSGTQTAHDVADQPRPG 1384
QY 1176 QOAGPPPSLGPVPTAQEASVLRTALGCVPGSGITKGPST----- 1215
Db 1385 SEGSCASSNPMHSSQOQFSG--VSQLPGPVPTSGVTDQNTVMAQADTEKLROKRL 1442
QY 1216 -----RVPDS-AITYRGSITHGTPADV-----LYKGTITRII 1247
Db 1443 REILQOQOQKKTAGREKSGSDSPAVPHGPGLOHQWQPVNQNQAFTRPPPPYGNIR-- 1499
QY 1248 GEDSPSRDLRG-REDSLPKGH-----VIYEGKKGH--VLSYBGGMSVTCQSKEDGRSS 1297

Db 1500 ---SPVAPPLGPRIAYVPKQORGPYPPDVASMGMRPHGFRFGPGSGSHGTMPSQE---RF 1553
QY 1298 SGPPHET---AAPKR---TYDMEGRVGRRAISSAIEGLMGRAPRPERHSHHLK-EQ 1348
Db 1554 LVFPQOIQSGVSPQLRRSSVSDM---PRPLNNSQMNPNVGL---POHFSQSLPVQO 1605
QY 1349 HHIRGSI-----TQIPRSYVEAQEDYLAREAKLLKREGTPPP--PPPS 1390
Db 1606 HNILGOAYIELHRAPDGRQLRPFSAPOGVSVEASNLL--RHGNFIPRDPFGPRHTDPM 1663
QY 1391 RDLTEAYKTOALGPLKPAHEGLVATVKEAGSIH--EIPRELRHT--PELPLAPRPL 1446
Db 1664 RRPQOGLPNO---LPVHPDLEQVPPSQOQGHSHSSMMVMTLNHPLGEGSEAPLST 1719
QY 1447 KEGSITQGTPLKYDTGASTTGGSKHDVRSIGSPGRTFFPVHPLDVMADARALE-RACYE 1505
Db 1720 SVFSETTSDNLQITTPSDGLEBEKLDSD--PSVKELDV-KDLEGEVVKDLD 1769
QY 1506 ESLSKRPGTASSGSGSIAR-----CAPVIV-----BELGKPROSPL 1541
Db 1770 EDLENL--NLDTEGKVVELDTLDNLETNDPNDLLRSGEFDIIAYTDPEDMDGKKSM 1827
QY 1542 TYEDHGAFFAGHLPGRGSPVTMREPTRLQEGS--LSSSKASQDRKLTST----- 1588
Db 1828 FNEELDLPIDDKL--DNQCVSVEPKKKEQENKTLVLSDKHSPOKSTVTNEVTEVLSPN 1885
QY 1589 -----PREIAKSPHSTVPEHHP-----HPISP--YEHLLR----- 1616
Db 1886 SKVESKETEKENDKNDVTPCSQASAHSDLANDGEKTSLHPCDPLFEKRTNRETAGPS 1945
QY 1617 -----GVSGVDLYRSHPIA---FDPTSI-PRGIPIDAAAAYYLPR 1653
Db 1946 ANVIQASTQLPAQDVINSCGISTPVLSSL-LANEKSDNSDIRPSGSP----- 1993
QY 1654 HLAPNHTYP-----HL--YPPYLIRGYDPTAALENRTIINDYIT-SQOMHNTATAMAO 1705
Db 1994 ---PPPTLPASPNHVSUSPPFFIA---PPGRVLDN---AMNSNVTVVSVRNH---VFSQ 2040
QY 1706 RADMLRGLSPRESSALNAAAGPRGIIDLSQVPHLPVLVPTPTGTATAMDRLAYLTPAP 1765
Db 2041 GVQVNFGLIPQST--VNHSLG-----TGKPAT-----QTGP 2070
QY 1766 QPFSSRHSSPLSPGGFTHLTKTPTTSSSERER-----DRDRERDRER 1810
Db 2071 Q--TSQSGTSSMS--GFQQLMIPTQLAQNRERPLLEEQPLLQDLLDQEROEQOQOQ 2126
QY 1811 EKSILSTT-----TVEHAPIWRPGTEQS----- 1834
Db 2127 MQAMIRQSRSEPPFPNIDFDAITDPIKAKMVALKINKVMAQNNGMPPMVMGRFPFMGQ 2186
QY 1835 --SGSGSGSGGGSSRRPASHAHQHSPISP-----RTQDAL 1871
Db 2187 VVTGTQNSEGNLGPQAIPODGSITHQISRPNPNPGFVNDQSQRKQYSEWQETOQLL 2246
QY 1872 QORPSVL-----HNTGMKGIIITAVFSPKPTVLRTSTSSSPVRPAATFPFATHCPLGGTL 1925
Db 2247 QMOQKYLEEIGAHKSKKAL-----SAKORTAKAGREFFEDAEOLKHVTE----- 2294
QY 1926 DGVTPTLMEVLLPKEAPRVARPERPRADTGHFLAK-----PPA-----RSGLE 1970
Db 2295 -----QOSMVOKLEQIRKQKQKBEALIEDYRIKQOQOCAMAPPTMPSVQOPPLI 2346
QY 1971 PASSPSKSGSPR-PLVPP-----VSGHATIARTPA-----KULAPHASDPDP-- 2012
Db 2347 PGATPTMSQPTFPWVQOQHOQHTTVISGHTSVPVMPSLPGWOPNSAFAHLPLNPRI 2406
QY 2013 -----APPASADPHREKTSOKPFS----- 2032
Db 2407 QPPIAQLPIKTCTPACTVSNANPQSGPPPRVFDNDNNPFSEFQERKERKEREQOQ 2466
QY 2033 -----IOELERLSLGYHGSSYSP-----EGVBPVSPVSS 2061
Db 2467 RIQLMOEVDQRALQORMEMEQHVGWSEISSRSTSVSQIPFYSSDLPFCDFMQPLGLQO 2526

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QY 2062 PSLTHDKGLPKHLEEL-----DKSHLEGLRP-----KOPGPVKLGGEAAHLP 2104
Db 2527 S-----FOHOQOMGOVLQOQNIQOQSGINSSTOTFMQTNERRQVGPSPFVDPSPISIP 2578
QY 2105 HLRPLPES-----QPSSSLLOTAPGVKGQRVVVTLAHIHSEVITOD 2146
Db 2579 VGSFNFSSVKQGHNLGSGTSFOQSPVRPSPFTPALPAAPPV-----ANSSLPCCGO 2628
QY 2147 YTRHHQQOLSAPLPAPLYSPFGASCVPDLDRPPSDLYLPPDPHGAPARGSPHSEGGKRS 2206
Db 2629 STITHG-----HSYPGSTQSLIQLY-----SDII-----PEEKGGKKR 2661
QY 2207 PBNKTSVLGGGEGIEPVSPPGMT-----EPGHSRGAIVPLLYRDGEQTEPSPRMGSKSPG 2263
Db 2662 TRKKKD-----DDAESTKAPSTPHSDIATPTPGISETTSPAVSTPSELQQADQESVEPV 2719
QY 2264 NTSQPPAFPSKL--TESNAMSVKSKQOEINKKLNTHNRNPEYNISQGTIEFNMPAITGT 2322
Db 2720 GPSTPNMAAGOLCTELENKLP-----NSDFSQATPNQOTYANSEVDKLSMETPAKT-- 2770
QY 2323 GLMTYRSQAOEHASTNMGLEAIRKALMGKYDQWEEESPPLSANAFNPLNASASLPAAMP 2382
Db 2771 -----BEIKLEKAETESCPG-----OEEPKLEQNGSKVEGNA-----VACP 2807
QY 2383 ITAADGRSDHLLTSP-----GGGKAKVSGRPSRKAKSPAPGLASGDRPPSVSVHSEGD 2439
Db 2808 VSSAQOS--PHSAGAPAAKGDGSGNELKXLLKNKSSS-----LLNQKPE--GSICSDEDC 2859
QY 2440 NRTPLTNRWEDRPSAGSTPPFYNPLIMRLQAGVMAAGPPPLPAGS----- 2488
Db 2860 TKDNKL---VEKQNPAGLQT-----LGAQMGGFGCGNQLPKTDGGSETKQSKRTQ 2910
QY 2489 --CPLAGPH---HAWDEEKPILCSQVETLS 2514
Db 2911 RTGEKAAPRSKRRKDEEKEQAMYSSTDTFT 2941

RESULT 23
US-09-854-133-425
; Sequence 425, Application US/09854133
; Publication No. US20020183499A1
; GENERAL INFORMATION:
; APPLICANT: Lodes, Michael J.
; APPLICANT: Mohamath, Raodoh
; APPLICANT: Henderson, Robert A.
; APPLICANT: Benson, Darin R.
; APPLICANT: Secrist, Heather
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
; FILE REFERENCE: 210121.475C10
; CURRENT APPLICATION NUMBER: US/09/854,133
; NUMBER OF SEQ ID NOS: 735
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 425
; LENGTH: 4019
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-854-133-425

Query Match 3.3%; Score 436; DB 9; Length 4019;
Best Local Similarity 18.3%; Pred. No. 3.8e-11;
Matches 555; Conservative 314; Mismatches 1010; Indels 1152; Gaps 142;

QY 34 HTDVGLEYOHHSRDYASHUSPGSIOTQ-----QRRRPSLLSEFQFQGNRSOELHLRPESH 90
Db 513 HSDIGPVTD-----DPSLLQPNVNSRSP--LSEQLDGLTSLPDLKMTDGA 559
QY 91 YL-----PELKGSEMEFIESKPRLELLPDLRLRPSPLLATQAPAGSEDLTKDRSLTGR 144
Db 560 ILGLKYKIPELGGKVEDL-----FTAVLSPANT----- 588
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QY 145 LEPVSPSPPTDPELELVPPLSLKEELIQNMDRVDREITMWEOQISKLKKQQLLEEA 204
Db 589 -QPTLPQP-----PPTQLLP-----IHNQDAFSR-MPLMGLI-----G 632
QY 205 AKPPPEKVPSPPTIESKHSRSLVQIYIDNRKKAABAHRILEGLOVELPLYNQPSDTR 264
Db 623 SSPHLPHNSLPPGSLGTSAIAQSSYPDARDKNSAFN-----PMASDPNNS-- 669
QY 265 QYHENIKINQAMRKKLILYFKERNHARKOWKQFCQYDQLMEALEKKVERIENPRRA 324
Db 670 -----WTSS-----APTVEG-ENDTMSNA 687
QY 325 KESKVREYKQFPEIRKQRELQERMSRVGQSGLSMAARSEHEVSEIIDGLSEQEN 384
Db 688 QRSTLK--WEK----- 696
QY 385 LEKQMRQLAVIIPMLYDADOQRIKFINMGLMADPMKYVKDQVMMWMSQEKETPREXP 444
Db 697 -EALGEMATVAPVLY---TNINFPNLKEEFPD--WITTRVKQIAKLWRK-- 739
QY 445 MQHPKNFGLIASFLERKTVAECLVYVYLTCKENYKSLVRSYRRRKQKQKQKQKQKQ 504
Db 740 -----ASSQERAP-----YVOKARDN-----RAALRINKVQMSNDSMKRQ 775
QY 505 QQQQQQMPRSEQEKEKEKEKEKEKEKEPEVENDKEDLLKBTDDTSGEDNDEKAV 564
Db 776 QQSDIDPSRIDSELFPKPLKQRESEHQE----- 805
QY 565 ASKGRKTANSQRRKRI--TRSMANEANSEBAITPOQSAELASMELNESRWTEBEMET 622
Db 806 -WKFRQMRQKSKQAKIEATOKLEQVKNQEQ--QKQKQKQKQKQKQKQKQKQKQKQKQ 856
QY 623 AKKGLLEHGRNNSAIAARMVGSKTYSCKNFYFNKYKRONLEILOHKLKMEKERNARRK 682
Db 857 PSSGI-----QSPLTPQPCNGNMSPAQSF-----HKELFYKQ----- 888
QY 683 KKKAPAAAEAAAF-----PPV-----VEDEMEASGVSGNEEMVEEAALHASGN 729
Db 889 PPSPTSTSSDDVFVKPQAPPPPPAPSRIP1QDLSQA----- 926
QY 730 EVPRGECSPATVNNSSDTESTIPSPHTEAAKDTGQNGKPPATLGADGPPGPPTPP--- 786
Db 927 -----QTSQPPSPQVFS---PGSNSRPPSPFMDPYAKWGTFRPPVPV 966
QY 787 ---RRTSRAPTEP-TPASEA---TGAPTPPPAPP-----SPSAPPPVPVK 824
Db 967 HSFSRNSAAPVENCFTPLSSVRPLOWNETTANRSPVZDLCSSTTNNNDPYAKPDTTP- 1025
QY 825 EKEEBETAAAPVVEEGEOKPPAAEBELAVDTGKABEFVKSECTEEAEAGKAKDAEAE 884
Db 1026 -----RPVMTDQPKSLGSLRSPVSEQT-----AKG---PIAA 1056
QY 885 ATAEGALKAKEGGSGRATTAKSSGAPODSSSATCSADEVDEAGGDKNRLSPPSL 944
Db 1057 GTSDDHFTK-----SPRADVFQORIP--DSYARPLLTAPLDSGGPPTKTP-MQPPSS 1108
QY 945 LPTGDPANASQPKPLDLKQLKQRAAALPPTQVTKVHEPPPPREDAAPTKPAAPPAPPPQN 1004
Db 1109 QDPYGSV-SQASRRLSVD---PYERPALTPRIDNFNSHNSQNDPYSPPLTTPHAPVNES 1163
QY 1005 LQESDAPQOQSGSPRGKSR-----SPAPPADKEFAAEAAQKLPDGPDPCTWSGLPFP 1056
Db 1164 FAHPSRAFSQPGTISRPTSQDPYSQPPGTPRPVVDYSQSSGTARNTDTPYSQPPGTPRP 1223
QY 1057 --VPREVIKASPHADPSAFS-----YA-PPGHPPLP-LGLHDTARPVLP 1097
Db 1224 TVDVP---YSQQPQTPRPTQTDLFVTPVYNORHSDPYAHPPGTPRPGISVPSQPATP 1280
QY 1098 RP-----PTI--SNPPPLISSAKH-----PSVLERQIGAISQMSYQLHPVYS 1138
Db 1281 RPRISGFTSSWTRPVLMPNODPFLQAAQNGRGPALPGPLVRPPDTCQ----- 1329
QY 1139 EHAAPVGPVTMGL-----PLPMDPKKLAPFSGVKQ-----EQLSPR 1175
```

Db 1330 --TPRPPGP---GLSDTFSRVSPAARDPYDQSPMTFRSQSDSFGTSGTAHDVADQPRG 1384
QY 1176 GOAGPPESLGVPTAQASVLRGTALGSPGCGSITKGPST----- 1215
Db 1385 SEGSCASSNPMHSQCOQFSG---VSLPGPVTSGVTDQNTVNMAQADTEKLROKQL 1442
QY 1216 -----RVPSDS-AITYRGSITHGTPADV-----LYKGTITRII 1247
Db 1443 REILLOQOQKXIAGREKGSQDSAPVHPGPIQHWQPNVQAFTRPDPYPGNIR--- 1499
QY 1248 GESPSELDRG-REDSLPKXH-----VIYEGKKH--VLSVEGMSVTCQSKEDGRSS 1297
Db 1500 ---SPVAPPLGRYAVFPDQGRGYPDPDVASMGMRPHGFRFPFGGSHGTMPSQB---RF 1553
QY 1298 SGPPHET---AAPKR---TYDMMEGRVGRATISSASIEGLMGRAITPERRHSPHLK-EQ 1348
Db 1554 LVPPQIQGSGVSPQLRRSVDM-----PRPLNSQMNPPVGL---PQHSFQSILPVQQ 1605
QY 1349 HHIRGSI-----TQGIPIRSYVAQEDYLRRKALKREGTPPP---PPPS 1390
Db 1606 HNILQAYIELRHAPDGRQRLPFSAPPGSVVEASSNL--RHGNFIPRPDPGPRHTDPM 1663
QY 1391 RDLTEAYKTALGPKLKAHEGLVATVKEAGRSIH--EIPREELRHT---PELPLAPRPL 1446
Db 1664 RRPPOGLPNQ---LPVHPDLEQVPPSQQGHSHVSSMMVRTLNHPLGGEFSEAPLST 1719
QY 1447 KEGSITQGTLYDYTGASTGSKKHVRSILGSPGRFTFPVHPDLDMADARALE-RACYE 1505
Db 1720 SVPESTSDMLQITTPSDGLEBKLDSDO-----PSVKELDV-KOLEGVEVKDLDD 1769
QY 1506 ESLSRPGTASSGGSGIAR-----GAPVIV---PELAKPRQSPL 1541
Db 1770 EDLENL--NLDTEDGKVELDLDNLTNDPLNLDLLRSGEFDI IAYTDELDGWDKXSM 1827
QY 1542 TYEDHGAFFAGHLPGRSPVTVMRBPTPLRQGS--LSSSKASQDKLTSI----- 1588
Db 1828 FNEELDLPIDDKL--DNQCVSVPEKKEQENKTLVLSDKHSPOKSKSTVTNEVKTEVLSPN 1885
QY 1589 -----PREIAKSPHSTVPEHP-----HPISP--YEHLR----- 1616
Db 1886 SKVESKETENKDNKDNVTPCSQASAHSDLDNGEKTSLHPCDPLFEKRTNRETAGPS 1945
QY 1617 -----GVSGVDLYRSHIPLA---FDPSTI--PRGIPLDAAAAYLPR 1653
Db 1946 ANVIQASTQLPAQDVINSCGISTPVLSL-LANEKSDNSDIRPSGP----- 1993
QY 1654 HLAHPNTYP-----HL--YPPYLIRGYPDTAALENRQTIINDYIT-SQOMHNTATAMAQ 1705
Db 1994 ---PPPTLPASPNHVSSLPFFIA---PPGRVLDN---AMNSNVTVSVRVNH---VFSQ 2040
QY 1706 RADMLRGLSPRESSLALNYAAGPRGIIDLSQVPHLPVLVPTPGTATAMDRLAYLPTAP 1765
Db 2041 GVQVNPGLIFQST--VNHSLG-----TKPAT-----QTGP 2070
QY 1766 QPFSSRHSSSPGPGGTHLTKTPTTSSSER-----DRDRDRDRDR 1810
Db 2071 Q--TSQGTSMSS--GPOQLMIQTLAQNRERPLLEEQPLILLDLDQEREEQOQORQ 2126
QY 1811 EKSILTSTT-----TVEHAPIWRPGTEQS----- 1834
Db 2127 MQAMIRQSRFPFNIDFDALTDPIMKAKVALKGINKVMAQNGLMPPMVMSRFPMPGQ 2186
QY 1835 --SGSGSSGGGSSSRPASHAHQHSFISP-----RTQDAL 1871
Db 2187 VVTGTQNSEQNLPQAIPODGSITHQISRPNPNFPGFVNDQSQRKQYBEWLQETQQL 2246
QY 1872 QQRPSVL-----HNTGMKGIITAVEPSKPTVLRLSTSTSSPVPAAFTFPATHCPLGTL 1925
Db 2247 QMOQKYLEEIGAHRSKKAL-----SAKORTAKGAREFPEEDAOLKHVTE----- 2294
QY 1926 DGVPYTLMEVLLAPKEAPRVARPERPRADTCHFLAK-----PPA-----RSGLE 1970

Db 2295 -----QOSMVQKOLEQIRKQKQKHAELIEDYRIKQOQOCAMAPPTMMPSVQPQPPLI 2346
QY 1971 PASSSKSGSEPR-PLVPP-----VSGHATIAARTFA-----KNLAPHASPOPP-- 2012
Db 2347 PGATPTMSQPTFPMVPPQLOHQOHTTVISGHTSPVRMPSLPGWPNASAPHLPLNPRI 2406
QY 2013 -----APPASADPHREKTSQSKPS----- 2032
Db 2407 QPPIAQLPIKCTPAPGTVSNANPQSGPPRVEFDNPNPSESFOBERKERLEREQOERQ 2466
QY 2033 -----IQELELSLGYHGSVSP-----EGVPSVPSVS 2061
Db 2467 RIOLMEOVDRQALQORMEMEGHVGSEISSRTSVSQIPFYSSDLPDCFQMLGLOQQ 2526
QY 2062 PSLTHDKGLPKHLEEL-----DKSHLEGELRP-----KOPGPVKLGGEAAHLP 2104
Db 2527 S-----POHQOQMGVLOQNIQOQGSINSSTQTFMCTNERRQVGFPSFVDSIPSIP 2578
QY 2105 HLRPLPES-----OPSSSPLLOTAPGVKHQHVVTTLAQHISEVITQD 2146
Db 2579 VGSNPFSSVKQGHGNSLGTSTFQOSPVRPSFTPALPAAPV-----ANSSLPCCQD 2628
QY 2147 YTRHHQOQLSAPLPAPLYSPFGASCVPDLRRPPSDLYLPPPDHGAAPARSPHSEGSKRS 2206
Db 2629 STITHG-----HSYPGSTQSLIQLY---SDII-----PEKGKKKR 2661
QY 2207 PBNKTSVLGGGSDGIEPVSPPEGMT---EPGHSRAVYPLLVRDGEQTEPSRMGSKSPG 2263
Db 2662 TRKKRD--DDAESTKAPSTPHSDITAPPTPGISETSTPAVSTPSELPOAQOQESVEPV 2719
QY 2264 NTSQPPAFFSKL--TESNSAMVSKKQEIKNKLNTHRNEPEYINISQGTIFINMPAITGT 2322
Db 2720 GPSTPNMAQOLCTELNKL-----NSDFSQATPNQOQYANSEVDKLSMETPAKT-- 2770
QY 2323 GLMITYRSQAOVHASTNMGLEAIIRKALMGKYDQWEEPPPLSANAFNPLNASASLPAMP 2382
Db 2771 -----BEIKLEKAEATSCFP-----QEEPKEBQNGSKVFNK---VACP 2807
QY 2383 ITAADGRSDHTLTSP---GGGKAKVSGRPSRKAAPGLASGDRPPSVSVHSGDC 2439
Db 2808 VSSAQOS--PHSACAPAAKAGDSGNELLKHLKNKSSS-----LLNQKPE--GSICSEDDC 2859
QY 2440 NRRTPLTNRWEDRPSAGSTPPYPNPLIMRLQAGVNASPPPPPLPAGS----- 2488
Db 2860 TKDNKL---VEKQNPAGELOQT-----LGAQMGGGFCGQNLKPTDGGSETKKQSKRTQ 2910
QY 2489 --GPLAGPH---HAWDEEPKPLLCQSQYETLS 2514
Db 2911 RTGKAAAPRSKKRKKDEEEKQAMYSSTDTPT 2941

RESULT 24

US-10-144-649A-425
; Sequence 425, Application US/10144649A
; Publication No. US20030118599A1
; GENERAL INFORMATION:
; APPLICANT: Lodes, Michael J.
; APPLICANT: Fan, Liqun
; APPLICANT: Wang, Tongtong
; APPLICANT: McNeill, Patricia D.
; APPLICANT: Algate, Paul A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
; FILE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CANCER
; FILE REFERENCE: 210121.475C11
; CURRENT APPLICATION NUMBER: US/10/144,649A
; CURRENT FILING DATE: 2002-08-21
; NUMBER OF SEQ ID NOS: 749
; SOFTWARE: Fast-Seq for Windows Version 3.0
; SEQ ID NO 425
; LENGTH: 4019
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-144-649A-425

Query Match		3.3%; Score 436; DB 14; Length 4019;
Best Local Similarity		18.3%; Pred. NO. 3.8e-11;
Matches		555; Conservative 314; Mismatches 1010; Indels 1152; Gaps 142;
QY	34	HTDVGLLEVQHSDRYASHLSGSIOTP---QRRRSLSSEFOPGNERGQELHLRSHS 90
DB	513	HSIDIGPVTD-----DPSLPQPNVQSSRP--LSEQLDGLSPDLKMTDGA 559
QY	91	YL-----PELGKSEFIESKPRLELLPDLPLRSPILLATQOPAGSEDLTKDRSLTGK 144
DB	560	ILGKLYKIPELGGKVEDL-----FTAVLSPANT----- 588
QY	145	LEPVSPSPPHDTPELELPPRLSKEBLIQNMDRVREITMTVEQQISKLKKQQQLEBEA 204
DB	589	-QPTPLPQPP---PPTQLLP-----IHNQDAFSR-MPLMNGLI-----G 622
QY	205	AKPPEPEKVPSPPIESKHSRLVQIYYDENRKAEAHRILEGLGQVELPLYNQSDTR 264
DB	623	SSPHLPHNSLPPGSLGTFSAIAQSSYPDAARDKNSAFN-----PMASDPNNS-- 669
QY	265	OYHENIKINQAMRKKLLLYFKRENHARKWKQKFCORYDOLMEALEKKYVERIENPRRA 324
DB	670	-----WTSS-----APTVEG-ENDTWSNA 687
QY	325	KESKVEYVEKQPEIRKQRELQERMQSRVQGRGSLGMSAARSEHEVSEIIDGLSEQEN 384
DB	688	QRSTLK--WEK----- 696
QY	385	LEKQMQLAVIPMLYDADQORIKFINMGLMADPMKVYKDRVMNMWSEQEKETPREXP 444
DB	697	-EALGEMATVAPVLY---TNINFNLKEEFPD--WTRVKQIAKLWRK----- 739
QY	445	MOHPKFGLIASFLERKTVAEVLYLYLTCKNENYKSLVRSYRRRGKSOQQOQQOQQ 504
DB	740	-----ASSQERAP-----YVQKARDN-----RAALINKVQMSNDMSMKRQ 775
QY	505	QOQQOQPMRPSQEEDEKEKEKEKEKEKEKEKEKEKEKEKEKEKEKEKEKEKEKE 564
DB	776	QOQSIDPSRISDELFPDLPKQRESEHQE----- 805
QY	565	ASGRKTANSQGRKGRIT--TRMANEANSEEAITPQQAELASMEINSSRWTEEMET 622
DB	806	-WKFQOQMRQSKQAQKIEATOKLEOVQNEQ--QOQQOQFGSOHL-----LVQSGSDT 856
QY	623	AKGGLLEHGRNWSAIARMVGSKTYSQCKNFYFKYKRONDELTOQHLKWKERNARR 682
DB	857	PSSGI-----QSLPTPQNGNMSPAQSF-----HKELFTKQ----- 888
QY	683	KKAPAAAABEAAF-----PPV-----VEDEMEASGVSGNEBEMVEEAEALHASGN 729
DB	889	PPSTPTSTSDDDVFKVPQAPPPPPAPSRIPQDSLSQA----- 926
QY	730	EVPRGCSGPATVNNSSDTESIPSPHTEAAKOTGQNGKPPATLGADGPPPGPTTP-- 786
DB	927	-----QTSQPSQVFS-----PGSSNSRPPSPMDPYAKMVGTPRPPVVG 966
QY	787	-----RTSRAPIP-TPASEA-----TGAPTPPAPP-----SPSAPPVVPVK 824
DB	967	HSFSRNSAAPVENCPTPLSVSRPLQWNETTANRPSFVRDLCSSTNNNDPYAKPPTP- 1025
QY	825	EKEEETAAAPPVEEGEQKPPAAEELAVDTGKAEPFVKSECTEEAEAGPAKGDAEAE 884
DB	1026	-----RPVMTDQPKSLGLSRSPVVSQI-----AKG---PIAA 1056
QY	885	ATAEGALKAEKKGSGGRATTAKSGAPQSDSASATCSADEVDEAGDKNRLLSRPSL 944
DB	1057	GTSDHFTKP-----SPRADVFQORIP-DSYARPLLTAPLDSGPGFKTP--MQPPPS 1108
QY	945	LPTGDPANASQPKPLDLKQLQRAAIIPIOVTKVHEPPREDAAPTAPAPPPQN 1004
DB	1109	QDYGSV-SQASRLSDV-----PYERPALTFRPIDNFSHNSQSDNDPYSQPLTTPHDAVNES 1163
QY	1005	LOPESDAPQPGSSPRGKSR-----SPAPPADKEAFAAEAQKLPDPPCWTSLGPP 1056
DB	1164	FAHPSRAFSQPGTISRPTSDPYSPGPTFRPVVDSYSSGTSARSNTDIFYSQPGPTPR 1223
QY	1057	--VPREVIKASPHAPDPSAFS-----YA-PPCHPLP-LGLHDTARVLP 1097
DB	1224	TTVDP---YSQQPQTPRPSTQTDLFTVPTNORHSDPYAHPPGTFRPGISVYSQPPATP 1280
QY	1098	RP-----PTI--SNPPPLISSAKH-----PSVLERQIGAISQMSVQLHVPYS 1138
DB	1281	RPRISSEGTFSMTRPVLMNQDPFLQAAQNRGPALPGPLVRPPDFCSQ----- 1329
QY	1139	EHAAPVGVVTWGL-----PLMDPKKLAPFSGVKQ-----EQLSPR 1175
DB	1330	--TPRPPG--GLSDTFSRVSAARDPYQSPMTPRQSDFSGTSAHDVADQPRG 1384
QY	1176	GOAGPESLGVTAQEAASVLRGTALGSVPGSGITKIPST----- 1215
DB	1385	SEGSFCASSNPMHSGQQQFSG--VSQLPFGVPTSGVTDONTNNMAQADTEKLQRQKL 1442
QY	1216	-----RVPSDS-AITYRGSITHTGPADV-----LYKGTITRII 1247
DB	1443	REIILQOQOQKKIAGEQKSGQSDSPAVPHPGPLQHWQENVAQAFTRPPPPYGNIR--- 1499
QY	1248	GEDSPSLDRG-REDSLPKGH-----VIYEGKKGH--VLSYEGQMSVTQCSKEGRRS 1297
DB	1500	---SPVAPPLGPRYAVFPKQRGYPDPDVASMGMRPHGFRFGPGGSHGTMPSEQE---RF 1553
QY	1298	SGPPHET-----HAPKR-----TYDMMEGRVGRAISSASIEGLMGRAIPPERHSHLHK-EQ 1348
DB	1554	LVPPQOIQSGVSPQLRRSVSDM-----PRPLNNSQMNPNVGL---POHFSQSPLVQO 1605
QY	1349	HIIRGSI-----TQIGPRSYVEAQDYLRLREAKLKRGTGTPP---PPPS 1390
DB	1606	HNILQAYIELHRAPDGRQLRPFSPAPGVSVEASN--RHGNFTPRDFPGPRHTDPM 1663
QY	1391	RDLTEAYTQALGPLKPAHEGLVATVKEAGRSIH--EIPREELRHT--PELPLAPRPL 1446
DB	1664	RRPQOGLPNQ---LPVHPDLEQVPPSQEQGSHVSSSMVMRTLNHPLGGFSEAPLST 1719
QY	1447	KEGSTQGTPLAKYDTCASTTGSKKHVDVRSILGSPGRTFFPVHPDLYMADARALE-RACVE 1505
DB	1720	SVPSSETSNLQITQPSDGLKEKLSDD--PSVKELD--KOLEGVEVKDLD 1769
QY	1506	ESLKRPGTASSGSGSIAR-----GAPVIV-----PELCKPRQSPL 1541
DB	1770	EDLENL--NLDTEGKVELDLDNLNLTNDPNLDDLRSGEFDI IAYTDELDWGDGKSM 1827
QY	1542	TYEDHGAPFAGHLPRGSPVTMREPTPRLOEGS--LSSSKASQDRKLTST----- 1588
DB	1828	FNEELDLPIDDKL--DNQCVSVEPKKEQENKTLVLSKHSPOKKSQKSTVNEKTEVLSPN 1885
QY	1589	-----PREIAKSPHSTVPEHHP-----HPISP--YEHLR----- 1616
DB	1886	SKVESKETEKENDKNDVDTFCSQASAHSLNDGKTSKSLHPCDPLFEKRTNRETAGPS 1945
QY	1617	-----GVSGVDLYRSHIPLA---FDPTSI-PRGIPLDAAAAYLPR 1653
DB	1946	ANVIQASTOLPAQDVNINSGITGSPVLSL-LANEKSDNSDIRPSPGSP----- 1993
QY	1654	HLAPNPTYP-----HL--YPPYLIRGYPDTAALENQTIINDYIT--SQMHNTATAMAQ 1705
DB	1994	---PPPTLPASPSNVSSLPPIA---PPGRVLDN---AMNSNVTVVSRVNH-----VFSQ 2040
QY	1706	RADMLRGLSPRESSLAINYAAGPRGIIDLSQVPHLPVLPVPTPGTATAMDRLAYLPTAP 1765
DB	2041	GVQVNPGLIPGST--VNHSLG-----TGKPAT-----QTGP 2070
QY	1766	QPFSSRHSSPLSPGGPHTLTKPTTTSSESER-----DREDRDRDRER 1810
DB	2071	Q--TSQSGTSSMS--GPQQLMIPQTLAQONRERPLLEEQPLLQDLQEQEQOQOQ 2126
QY	1811	EKSILTSTT-----TVEHAPIWRPGTEQS----- 1834

Db 2127 MQAMIRQSRPFPNDFDITPIMKAKWALUKINKWMAQNNGMPPMVRFPFMQ 2186
QY 1835 --SGSSGSGGSSSRPASHAHQSPIS-
Db 2187 VVTGTQNSGQNLGPOAIPODGSITHQISRPNPNFGFVNDQKQYEWLQETQQLL 2246
QY 1872 QORPSVL-----HNTGKMGIIITAVPSKPTVLRSTSTSPVRPAATFPFATHCPLGGTL 1925
Db 2247 QMOQKYLEEIQIAGHRKSKAL-----SAKQRTAKKAGREPFEDAEQKHVTE----- 2294
QY 1926 DGVPYPTLMEPVLPKAPRVARPERPRADTGHAFK-----PPA-----RSLGE 1970
Db 2295 -----QOSMVQKLEQIRKQKQHEALIEDYRIKQOQCACAMPTMPSVQOPPLI 2346
QY 1971 PASSPSKGSRR-PLVPP-----VSGHATARTPA-----KNLAPHASPPP-- 2012
Db 2347 PGATPPTMSQPTFPMVQLOHQOHTVVISGHTSPVRMPSLPGWPNASAPHLPLAPPRI 2406
QY 2013 -----APPASADPHREKTOSKPS----- 2032
Db 2407 QPPIAQLPIKTCTPAGTVSNANPQSGPPRPFVDDNNPFSFQBERKERLREQOERQ 2466
QY 2033 -----IQELELSRGYHGSYSP-----EGVFPVSPVS 2061
Db 2467 RIQLMQEVDQRALQORMEQHGMVSGEISSRTSVSQIPFYSSDLPCDFMQPLGLOQ 2526
QY 2062 PSLTHDKGLPKLEEL-----DKSHLEGEURP-----KQPPVKLGGEAAHLP 2104
Db 2527 S-----POHQOQMGVLOQQNIQOQSINSSTQTFMTNERRQVGPSPFVDSIPSIP 2578
QY 2105 HLRPLPES-----QPSSPLLOTAPGVKGHRVVVTLAQHISEVITQD 2146
Db 2579 VGSFNFSSVKQGHNLGSGTSFQSPVRPSTPALPAAPPV-----ANSSLPQGD 2628
QY 2147 YTRHHQOOLSAPLAPLYSPGASCPVLDLRPPSDLYLPPDPHGAPARGSPHSEGGKRS 2206
Db 2629 STITHG-----HSYPGSTQSLIQLY-----SDII-----PBEKGKKR 2661
QY 2207 PEPNKTSLVGGGDIETPVSPPEGMT-----EPGHSRSNAVYLLYRDGEBQTPSRMGSKSPG 2263
Db 2662 TRKKRD--DDASTKAPSTPHSDITAPPTPGISETTSTFAVSTPSELPOAQOESVEPV 2719
QY 2264 NTSQPPAFFSKL--TESNSAMVSKKQBINKLANHNRNEPEYNI SQGTBFIFNMPAITGT 2322
Db 2720 GPSTPNMAAQCLTELENKLP-----NSDFSQATPNQOQTYANSEVDKLSMETPAKT-- 2770
QY 2323 GLMYSRQAVQEHASTNMGLEAIRKALMGKYDQWEESSPLSANAFNPLNASASLPAMP 2382
Db 2771 -----BEIKLEKAEATESCPG-----QBEPKLEBQNGSKVEGNA---VACP 2807
QY 2383 ITAADGRSDHTLTSP--GGGKAKVSGRFSRRKAKSPAGLASGDRPPSVSVHSEGDC 2439
Db 2808 VSSAQOS--PPHSAGAPAAKQSGNELLKHLKNKSS-----LLNQKPE--GSCSEDDC 2859
QY 2440 NRETPLTNRWEDRPPSAGSTPPFPYNPLIMRLAQGVNASPPPPFCLPAGS----- 2488
Db 2860 TKDKNL---VEKQNPABGLQT-----LGAQMGGGCGGNLPKTDGGSSETKKQSRKTQ 2910
QY 2489 --GPLAGPH---HAWDEEPKPLCSQVETLS 2514
Db 2911 RTGEKAAPRSKGRKKDEEKQAMYSSTDTTFT 2941

RESULT 25

US-10-362-892-8
; Sequence 8, Application US/10362892
; Publication No. US20040038881A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.; BANDMAN, Olga
; APPLICANT: NGUYEN, Daniel B.; WALIA, Narinder K.
; APPLICANT: HAPALIA, April J.A.; YAO, Monique G.
; APPLICANT: GANDHI, Ameena R.; GURAJAN, Rajagopal

; APPLICANT: DING, Li; PATTERSON, Chandra S.
; APPLICANT: YUE, Henry; BAUGHN, Marian R.
; APPLICANT: TRIBOLBY, Catherine M.; THORNTON, Michael B.
; APPLICANT: ELLIOTT, Vicki S.; LU, Yan
; APPLICANT: ISON, Craig H.; AU-YOUNG, Janice K.
; APPLICANT: TANG, Y. Tom; AZIMZAI, Yalda
; APPLICANT: BURRILL, John D.; MARCUS, Gregory A.
; APPLICANT: ZINGLER, Kurt A.; LU, Dyung Aina M.
; APPLICANT: LAL, Preeti G.; RAMKUMAR, Javalaxmi
; APPLICANT: WARREN, Bridget A.; KEARNEY, Liam
; APPLICANT: POLICKY, Jennifer L.; THANGAVELU, Kavitha
; APPLICANT: BURFORD, Neil
; TITLE OF INVENTION: HUMAN KINASES
; FILE REFERENCE: PF-0209 USN
; CURRENT APPLICATION NUMBER: US/10/362,892
; CURRENT FILING DATE: 2003-02-25
; PRIOR APPLICATION NUMBER: PCT/US01/27219
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 60/229,873
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: US 60/231,357
; PRIOR FILING DATE: 2000-09-08
; PRIOR APPLICATION NUMBER: US 60/232,654
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: US 60/234,902
; PRIOR FILING DATE: 2000-09-22
; PRIOR APPLICATION NUMBER: US 60/236,499
; PRIOR FILING DATE: 2000-09-29
; PRIOR APPLICATION NUMBER: US 60/238,389
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: US 60/240,542
; PRIOR FILING DATE: 2000-10-13
; NUMBER OF SEQ ID NOS: 48
; SOFTWARE: PERL Program
; SEQ ID NO 8
; LENGTH: 2429
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20040038881A1 079284CD1
US-10-362-892-8

Query Match 3.3%; Score 429.5; DB 12; Length 2429;
Best Local Similarity 19.9%; Pred. No. 4.2e-11;
Matches 551; Conservative 305; Mismatches 982; Indels 931; Gaps 139;

QY 38 GLLEYOH-----SRDYASHLSPGSI-----IQORRRPSLLSEFQPGNERSQELHLRPE 87
Db 215 GVLSFTHHQIIEIARDCLDKSHQGLITSRYFLQLQHLKDKLL-----QEAHDRSE 264
QY 88 SHSYLPGLGKSEMEFTESKRPRLELLPDLLRPSLLATQOPAGSEDLTKDRSLTGKLEP 147
Db 265 S-----GELAFIKQLVRKILIV---IARPARLLEC-----LE- 293
QY 148 VSPSPPHPTDPE-----LELVPRLSKBELIQNMDRVDREITVMVEQOISLKKKQOOLEE 202
Db 294 -----FDPEFYYLLEAAEGHAKEGQGIKT--DIPYI-----ISGLNKDPLEE 337
QY 203 EA-----AKPPEPEKVPSPPIESKHSRSLVQIYIDENRKAENRILSGLGPOVE 253
Db 338 MAHLGNYDSGTATPTETDESVSNSASLKL-----RKPRE----- 373
QY 254 LPLYNQPSDTRQYHENIKI--NOAMRKLILYFKRRNHARKQWKQKFCQRY-----DQLM 306
Db 374 -----SD-----FETIKLISNGAYG---AVYFVRKHESQRFAMKKINKONLILRNQIQ 419
QY 307 EA--LEKKVERIENPRRRAKESKVREYKEQFPEIRKQRELOERMOSRVG-----QRGS 359
Db 420 QAFVERDILTFAENP-----FVVSMYCSFETRRHLCMVMEVEGGDCATLMKMN 468
QY 360 G-USMSAAARSEHEVSIIDGLSEQENLEKQMRQOLAVIPPMLYDADQORIKFINNN-----G 414

1111 LSPRSP-----TPSYRSTPDPFSS--GTNSSOSSPSSSAPNS 1145
1015 PGSSPRGKSRSP-----APPADKEAFAEAAQKLPDGPCCWTSGLPFPVPPREVIVAKASPHA 1069
1146 PACS--GHTRPSTLHGLAPKLGQRTRSRGRKAGNIP-----LSPLA 1186
1070 --PDPSAFSYPAGHPLPLGLHDTARPVLPR--PPTISNPPPLISSAKHPSVLERQIGAI 1125
1187 RPSPTPTQPSQPSFSPPLGLHSLGNSKIAQAFPSKWHSPPTIVR-----1231
1126 SQGMSVOLHVPYSEHAKAPVGPVTMGLPLPMDPKLAPFGVQKQOLSPRGQAGPPESLG 1185
1232 -----HIVRPKSAEPPRSPL--LKRVSQSEKLSPSYSGDKKLCR-----KHSLE 1275
1186 VPTAQASVLRGTALGSPVGGSTTKGIPSTRVPSDSAITVRGSIHTGTADVLTKGTTIR 1245
1276 V-TOEB--VOREOSQREAFLOSUDENVDPVPLSRARVEOQCL-----KRPVSR 1322
1246 IIG-EDSPSRLDRGREDSLPKGHVITYEGKKGHVLSEYEGGMSVTQCSKEDGRSSGPPHET 1304
1323 KVGQESSVDLDR--DKL-KAKVVVK-----KADGF-----1350
1305 AAPKRYDMMEGRVGRAISSASIEGLMGRAIIPRHSHPHLKBQHIRGSIITQGIPIRSYV 1364
1351 -----PEQESH--QKSHGPGSDLENFALFKL 1375
1365 EAQEDYLRREAKLLKREGTPPPPPSRDLTEAYKTOA-----LGPLKLKPAHEGLVAT 1417
1376 E-----EREKKVY--PKAVERSSFTENKASQOEAPPLGSLLDKALHKAQSVR 1420
1418 VKEAGRSIHEIPREELRHTPELPLAPRLKEGSIITQGTPLKYDGTASTTG--SKKHDRV 1474
1421 ASEGMSDGPVPAHRQGGGDFRAPAP--GTLQDGLCHSLDRGIGSGKEGTEKSSQAK 1477
1475 SLIGSGRTFPVPHLDVMDADALERALACEVESLKSRRPGTASSSGSIIARGAPVIVPELG 1534
1478 ELLRCE-KLDSKLANIDYLRKKMSLEDK--EDNL-----CPVL-----1512
1535 KPROSPLTYEDHCAPFAGHLPRGSPVT--NREPTPLRQEGS-LSSSKASODRKLTSPT 1589
1513 KPWTAGSH-----CLP-GNVPRTGGQEQPPAPESAFVSSTHAAQMSAVSFVP 1563
1590 REI-----AKSPHSTVPEHHPHIPISYEHLLRG-----VSGVDLY 1624
1564 LKALTGRVDSGTEKPGVAPE-SPVRKSPSEYKLEGRSVSCLKPIEGTLDIALLSGPQAS 1622
1625 RSHIP--LAFDPT-----SIPRIGPL-----DAAAYYL-PRHLAPNTYPHLYPP 1667
1623 KTELPSFESAQSPSPSGDVRASVPPVLPSSGKKNDDTSARELSPSLKNKXSY--LLRP 1680
1668 YLIRGYPDTAALENRQTII--NDYITSQMHNTA--TAMAQRAADMRLGLSPRESSL 1720
1681 WFL--PPSRGLQNSFAVSLPDPEFKDRKGPHPTARSFGTVMESNPQORESSPKHQ--1735
1721 ALNYAAGPRGII DLQSVPHLPVLVPTTGGTPATMDRLAYLPAPQPFSSRHSSPLSPG 1780
1736 --DHHTDPKLLTCLGQNLHSPDLARP-----RCLPLPE 1766
1781 GPHLTLPKPTTSSSR-----ERDRDR-----ERDRDRERKSIL-----1815
1767 ASPSRKPKGLRESSERGPPTARSERSAARADTCRBPSMELCPFPETAKTSDNKNLLSVGR 1826
1816 -----TSTVTVHAPIWRPPTQSGSGSGSGSGSGSRPASHSHAHQHSPISPRTOD 1869
1827 THPDFTOQAMEKA--WAPG-----GKTNHKDGP--EARPPRPNRNSLHAGIPCCKE 1877
1870 ALQORPSVLHNTGMKGII TAVESKPTVLRTSTSSPVRPAATFPFATHCPGLGTLDDGVY 1929
1878 LGKVR-----RGVEPKPEALLARRSLQ-----PGIESEKSEKLSS-F 1914
1930 PTLM-----EPVLLPKAEARNVARPER-PRADTGHAFLAKEPPAR-----SGLFPASS 1974
1915 PSLQKDGAKPE--RKEQPLQRHPSSIPPPPLTAKOLSSPAARQHCHSPSHASGREFPAK 1972

1975 PS---KGSEPRPLVPPVSGHATIARTPAKNLAPHASDPDPAPPASADPHREKTOSKPF 2031
1973 PTAAPSSSPQDPKPEVAHS-----ESSHKPRPGDPGPKTKHPDPSLSQKP- 2023
2032 SI-----QBLEURSLG---YHGSSYSPEG--VEPVSPVS-----SPSLTHDKGLPKHLEEL 2077
2024 SVGATKGRPATQSLGSSREGHSGKSGDFVPFATPGSQNKASDGIQGGEGSPVPLHT 2083
2078 DKSHLEGLARPQPG-PVKLGGEAAHLPHLRPLPSPQSSSSPLLQTAPVKVGHQVRVTLA 2136
2084 DRAPLDAPQPTSGRPLVELEKPVHLPRPHGHPSEPADQKL--SAVGEK-----2132
2137 QHISEVITQDYTRHHPQQLSAPLAPLYSPFPGASCPLVLDLR--RPPSDLYLPPPDHGAP 2193
2133 -----QTLSPKHPK-----PSTVKDCP-TLCKQTDNRQTDKSPSQ-----P 2167
2194 ARGSPHSEGGKRSPE-----PNKTSVLGGEDGIEPVSPPEGMTEPCHRSASVYPLLYRGG 2249
2168 AANTDRRAEKKCTEALYAPAEGLKLEAGLSFVHSENRLKGAERPAAGVGKGGP-----2221
2250 EQTESRMGSKSPGNTSOPPAFFSKLTESNSAMVSKKQEIKNKLNTHNRNEPEYNISOP 2309
2222 -----EARGKGG-PQKPP-----TEAD-----KNGMKRSP-----2247
2310 GTEIFNMPAITGTLMTYRSQAVQBH-----ASTNMGLEAIIRKALMGKYDOWEESPPLSA 2365
2248 -----SATGQSSFRSTALPEKSLSCSSFPETRAVREASAASD-----2287
2366 NAFNPLNLSASLPAAMPITTAADGRSDHLLTSPGGGK---AKVSGRPSR-----2412
2288 -----TSSAKAAGGMLELPAPSNDRHRKAQPAGEGRTHMTKSDSLSPSVSTLPLESHH 2341
2413 -----KAKSPAGLASGDRPPSVSVHSEGDCCNRRPTLN 2447
2342 PDNWTGGASHDRALSVTATVGTGKGDPAFA-----OPPPARKQNVGRDVTKPSAPN 2396
2448 RVWEDRPSS 2456
2397 ---TDRPIS 2402

RESULT 27

US-10-124-557-52
; Sequence 52, Application US/10124557
; Publication No. US20020137894A1

GENERAL INFORMATION:

APPLICANT: Turner, Katherine
Clark, Stephen C.
Jacobs, Kenneth
Hewick, Rodney M.
Gesner, Thomas G.

TITLE OF INVENTION: Megakaryocyte Stimulating Factors

NUMBER OF SEQUENCES: 143

CORRESPONDENCE ADDRESS:

ADDRESSEE: Genetics Institute, Inc.

STREET: 87 CambridgePark Drive

CITY: Cambridge

STATE: Massachusetts

COUNTRY: U.S.A.

ZIP: 02140

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

APPLICATION NUMBER: US/10/124,557

FILING DATE: 16-Apr-2002

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/643,502

FILING DATE: 18-JAN-1991

APPLICATION NUMBER: US 07/546,114
FILING DATE: 29-JUN-1990
APPLICATION NUMBER: US 07/457,196
FILING DATE: 29-DEC-1989
APPLICATION NUMBER: US 07/390,901
FILING DATE: 08-AUG-1989
ATTORNEY/AGENT INFORMATION:
NAME: Cserr, Luann
REGISTRATION NUMBER: 31,822
REFERENCE/DOCKET NUMBER: GI 5190
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)876-1170
TELEFAX: (617)876-5851
INFORMATION FOR SEQ ID NO: 52:
SEQUENCE CHARACTERISTICS:
LENGTH: 1363 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 52:
US-10-124-557-52

Query Match 3.2%; Score 428; DB 13; Length 1363;
Best Local Similarity 20.8%; Pred. No. 2.5e-11;
Matches 266; Conservative 136; Mismatches 516; Indels 360; Gaps 54;

QY 476 NYKSLVRRSYRRRKSGQ-----QQQQQQQQQQQQQQQPMRPSQEEKDEKE 524
DB 85 SQTIKSTTKSPNNKKTKVIESEITEHSVSENQSSSSSSSSSSSSSIWIKSS 144
QY 525 KEKEAEKE-BEKPEVNDKEDLKEK-----TDDT-SGEDNDEKAVASKGRKANSQ 575
DB 145 KNGAANRELQKLKVKONKNRTKKTPKPPVVDGAGSLDNGDFKVTTPDTSIQHNK 204
QY 576 GRRKGRITRSMANEESEAITP-QQSAAELASMELENESSRWTEEMETAKKGLLEGRNW 634
DB 205 VSTSPKLT--TAKPINRPLSPNSDTSKETSITVKNKETTETKETTNNKQTSIDGKEK 262
QY 635 SAIAWMVGSKTVSQCKFYENYKKRQNLDEILOQHLKME---KERNARRKKKKAPAAAS 691
DB 263 TTSKAKETQSIKTSKDL-----APTSKVLAKPTPKAETTTKGPALITPKFTPTPK 315
QY 692 EEAAPPVVEDEMEASVSGNEEMVEAEALHASGNVPRGECGSPATVNNSSDTEI 751
DB 316 EPASTTP-----KEPT-----PTTIKSAPTPK 339
QY 752 PSHTENAKDTGQPKPATLGNAGDPPPGPTTPRTSRAPTEPTPASEATCAPTP-- 809
DB 340 PAPTITKSAPTTPKEPAPTTT-----KEPAPTTPKEPAPTTTKEPAPTT-TKSAPTTPKE 393
QY 810 PAPSPSAPPVVPVKEKEEETAAPVVEGEQKPPAAEELAVDTGKAEPEVKSECTEE 869
DB 394 PAPTTPKAPPTPK-----PAPTTPKETPTTPKEPAPTTKEPAPTTKEPAPT----- 444
QY 870 AEBGPAGKDAEAAETAEGALKAEKKGSGRATTAKSSGAPQDSSTACSADEVEA 929
DB 445 APKPAPTTPKEPAPTTKEPAPTTKE-----FSPPTPKAPPTTKSAPTTKP----- 496
QY 930 EGGDKRLLSPRESLLTPTGDPDRANASQPKPLDLKQLKQRAAAIPIQVTKVHP-----P 985
DB 497 -----APTITKSAPTTPKEP-----SPTTKEPAPTTP 524
QY 986 REDA--APTAPKAPPAPPPQNLQPSDAPQCGSSPRGKSRSPAPPADKEAFAAEAQKLP 1043
DB 525 KEAPATPKKAPATTPKEPAPTTKEPAPTTKAPATPKAPATPKAPATPKATPTTKULT 584
QY 1044 GDDP-----CWTSGLPFPVPPREVIKASPHAPDPFSAFSPGHPPLGLGLHDTARVLP 1099
DB 585 PTTPEKLAPTTPKEPAPTTPEELAPTTPEPTPT-----PEEPAPT-TPKAAAPNTPKE 638
QY 1100 PTISNP--PPLISSAKGPSVLRIQIGALSQGMVOLHVVPYSEHAKAP-----VGPVTMGLP 1153
DB 639 PAPTTPKEPAPTTPKAPA-----PTTPKETAPTTPKGTAPTTLKEP 679

QY 1154 LPMDPKKLAPFSVKQEQLSPRQAGAPPBSLG---VPTAQEASVLRTALGSPVGGSIK 1210
DB 680 APTTPKKPAP-----KELAPTTTKEPTSTTSOKPAPTTT-----KGT----- 717
QY 1211 GIPSTRVPSDSALTIRGSIHTGTPADVLVYKGTITRIIGEDSPSLRDRGREDSLPKGHVY 1270
DB 718 --PTT--PKPAPT-----TPKEPAPTTPKGTAPTTLKEPAPTTPPKPAPKELAP----- 763
QY 1271 EGKKGHVLSYEGGMSVTQCSKEDGRSSSGPPPHETA--APKRTYDMMEGRVGRAISSASIE 1328
DB 764 -----TTTKGPTST-----SDKAPATPKETAPTTPKEPAPTTPPKPAPTTPETP-- 809
QY 1329 GLMGRAIPP---ERHSPHLKEQHIIIRGSIQTGIPRSYVEAQEDYLRRKAKLKREGTP- 1384
DB 810 -----PPTTSEVSTPTTKEPTTIHKSDESTE-----LSAETPK 846
QY 1385 -----PPPPPSRDLTEAYKQALGPLKPKAHEGLVATVKEAGRSIHIEPREELRHTPE-L 1439
DB 847 ALENSPKPEGVPTTKT-----PAAATKPE---MTTAKD-----KTTDRDLRTTPTT 890
QY 1440 PLAPRPLKEGSIT-----QGTPLKYDTGAS-----TTGSKK 1470
DB 891 TAAPKMTKETATTTTEKTTESKITATTQTSTTTQDTTTPFKITTLKTTTLAPKVTTKT 950
QY 1471 HDVRSLIGSPGRTFPVPHPLDVNMADARALERACYEESLSKSRPGTASSSGGS--IARGAPVI 1529
DB 951 ITTTEIMNKPEET-----AKPDRAATNSKATTPKPKQPKAPKPTSTKKPKT 998
QY 1530 VPBLGPRPSPLTYEDHGAPFAGHAPGRGSPVTWRE--PTPRLOEGSLSSS---KASQDRK 1584
DB 999 MPVRVKPKTTP-----TPRKMTSTMPELNPTSRIAEAMLQTTTRPNQTPNSK 1045
QY 1585 LT-----STPREIAKSPHSTVPEHHPH-----PISPYEHLRGSVGVLDYRS 1626
DB 1046 LVEVNPKSEDAAGAEETHMLLR--PHVPMPEVTPDMDYLPVNOGIIN----- 1095
QY 1627 HIPLAFDPTSPRGIFLD 1644
DB 1096 --PMLSDETNICNGKPD 1111

RESULT 28

US-09-522-207-30
Sequence 30, Application US/09802207
Publication No. US20020086824A1
GENERAL INFORMATION:
APPLICANT: Warman, Matthew
APPLICANT: Carpten, John
APPLICANT: Trent, Jeffrey
APPLICANT: Marcelino, Jose
TITLE OF INVENTION: Novel Methods and Reagents for the Treatment of Osteoarthritis
FILE REFERENCE: Case-06212
CURRENT APPLICATION NUMBER: US/09/802,207
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 09/619,175
PRIOR FILING DATE: 2000-07-19
PRIOR APPLICATION NUMBER: 60/145,328
PRIOR FILING DATE: 1999-07-23
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn version 3.0
SEQ ID NO 30
LENGTH: 1404
TYPE: PRT
ORGANISM: Homo sapiens
US-09-522-207-30

Query Match 3.2%; Score 428; DB 12; Length 1404;
Best Local Similarity 20.8%; Pred. No. 2.5e-11;
Matches 266; Conservative 136; Mismatches 516; Indels 360; Gaps 54;
QY 476 NYKSLVRRSYRRRKSGQ-----QQQQQQQQQQQQQPMRPSQEEKDEKE 524
DB 639 PAPTTPKEPAPTTPKAPA-----PTTPKETAPTTPKGTAPTTLKEP 679

Db 126 SQTIKSTTKRSPKPPNKKTKKVIIESEITEHSVSENQSSSSSSSSSSSTIWKIKSS 185
QY 525 KEKEAEKE--EKEPEVENDKEDLLKEK-----TDDT-SGEDNDEKEAVASGRKRTANSQ 575
Db 186 KUSAANRELOKKLVKXDNKNRTKKPTPKPPVDEAGSLDNGDFKVTTPDTSITQHKN 245
QY 576 GRKGRGITSRMANEANSBAITP-QQSAELASMELNESSRWTEEMETAKKGLLEHGRNW 634
Db 246 VSTSPLIT--TAKPINRPSLPSNDSKETSLSLVNKETTVETKETTITNNKQTSSTDGKEK 303
QY 635 SAIRAMVSGTQVSCQNFYFNKKRQNLDEILOHKLKME---KERNARKKKKAFAAAS 691
Db 304 TTSKETOQIEKTSKDL-----APTCKVLAKPTPKAETTTKGPAITTPKEPTTPPK 356
QY 692 EEAAPPVVVEDEMEASGVSGNEEMVEAEALHAGNEVPRGECGPATVNNSSDTEGI 751
Db 357 EPASITP-----KEPT-----PTTIKSAPTTPKE 380
QY 752 PSPTTEAAKDTGONGPKPPATLGADGPPPPPTPPRTSRAPLEPTPASEATGATPPP-- 809
Db 381 PAPTITKSAPTTPKEPAPTTT---KEPAPTTTPKEPAPTTTTPKEPAPTT-TKSAPTTPKE 434
QY 810 PAPPSAPPPVVPKKEKEBEETAAPVVEGEQKPPAAEBELAVDTGKABEVPKSECTEE 869
Db 435 PAPTTPKCAPPTTPKE--PAPTTPKEPTTTPKEPAPTTTPKEPAPTTTPKEPAPT----- 485
QY 870 AEBGPAKGDAAEAEATAEGALKAEKKGSGRATTAKSSGAPQDSDSATCSADEVDEA 929
Db 486 APKAPAPTTTPKEPAPTTTPKEPAPTTTKE-----PSPTTPKEPAPTTTTPKEPAPT 537
QY 930 EGGDKNRLSPRPSLLTPTGDPANASPOKPLDLKQKORAAAIPIQVTKVHEP-----P 985
Db 538 -----APTITKSAPTTPKEP-----SPITTPKEPAPTTTP 565
QY 986 REDA--APTKPAPAPPPPPONLOPESDAPQOQSSPRGKRSRSPADPADKEAFAAEAQKLP 1043
Db 566 KEPAPTTPKPPAPTTPKEPAPTTTPKEPAPTTTTPKAPATAPKEPAPTTPKETAPTTPKLT 625
QY 1044 GDDP---CWTSGLPVPPVPREVIKASHAPDPSAFSYPAGPHPLPLGLHDTARVLP 1099
Db 626 PTTPEKLAPTTPKAPATTPPEELAPPTTPEPTT---PEPAPT-TPKAAAPTTPKE 679
QY 1100 PTISNP-PPLISSAKHPSVLEROIGAISQMSVQLHVPVSEHAKP-----VGPVTMGLP 1153
Db 680 PAPTTPKEPAPTTTPKEP-----PTTPKETAPTTPKGTAPTTPK 720
QY 1154 LPMDPKPLAPFSGVQKQEOQLSPRCQAGPPESLG--VPTAQEASVLGTLGSGVGSITK 1210
Db 721 APTTPKPPAP-----KELAPTTPKPTSTSDKAPATTP-----KGTA----- 758
QY 1211 GIPSTRVPSDAITYRGSITHTGPPADVLYKGTITRIIGEDSPKRLDRGREDSLPKGHVY 1270
Db 759 --PPT--PKEPAPT---TPKEPAPTTPKGTAPTTPKAPATTPKAPKAPKELAP----- 804
QY 1271 EGKKGHVLSEYEGMSVTCQSKEDGRSSGPPHETA--APKRTYDMMEGRVGRASIASIE 1328
Db 805 -----TTTKGTSIT---SDKAPATTPKETAPTTPKEPAPTTTPKAPATTPETP-- 850
QY 1329 GLMGRAIPP---BRHSPHHKBOHHIRGISTQIGPRSYEAQEDYLREAKLLKRGTP- 1384
Db 851 -----PPTTSEVSTPTTTPKEPTTIHKSDESTPE-----LSAEPTEK 887
QY 1385 ----PPPPPSRDLTEAVKIQALGPLKPKAHEGLVATVKEAGRSIHEIPREELRHTEPE-L 1439
Db 888 ALENSKPEPGVPTTKT-----PAATKPE---WTTTAKD-----KTTERDURTTTPE 931
QY 1440 PLAPRLKEGSIIT-----QGTPLKYDTGAS-----TTGSKK 1470
Db 932 TAAPKMTKETATTTEKTESKITATTQTSTTTQDTPPKITLTKTLTTLAPKVTITTKT 991
QY 1471 HDVRSLGSCPTFPVPHPLDVADARALERACIYESLKRPGTASSGGS--IARGAPVI 1529
Db 992 ITTTEIMNKPEET-----AKPKDRATNSKATTPKQKPTKAPKKPTSTTKPKT 1039

QY 1530 VPGLKGRQSPRLTYEDHGAPFAGHLPRGSPVTMRE--PTPRLQEGSLSS---KASQDRK 1584
Db 1040 MFRVRKPKTTP-----TPRKWTSMPELNPTSRIAEAMLQTTTRPNQTPNSK 1086
QY 1585 LT-----STPREIAKSPHSTVPEHHH-----PISPYEHLRLRGVSGVDLYRS 1626
Db 1087 LVEVNPKSBDAAGBGETPHMLLR-PHFVMPVETPDMOYLPRVPNOGIIIN----- 1136
QY 1627 HIPLAFDPTSIPRGIPLD 1644
Db 1137 --PMLSDEINICNGKPD 1152

RESULT 31

US-09-735-367B-2
; Sequence 2, Application US/09735367B
; Patent No. US20020151477A1
; GENERAL INFORMATION:
; APPLICANT: Gustafsson, Jan-Ake
; APPLICANT: Caitea, Francoise
; APPLICANT: Antonsson, Per
; TITLE OF INVENTION: NUCLEAR RECEPTOR COACTIVATOR
; FILE REFERENCE: 102093-100
; CURRENT APPLICATION NUMBER: US/09/735,367B
; PRIOR FILING DATE: 2000-12-12
; PRIOR APPLICATION NUMBER: US 60/174,544
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 2063
; TYPE: PRT
; ORGANISM: Human
US-09-735-367B-2

Query Match 3.2%; Score 428; DB 9; Length 2063;
Best Local Similarity 18.9%; Pred. No. 4e-11;
Matches 408; Conservative 269; Mismatches 837; Indels 646; Gaps 98;

QY 591 NSEEAITPQSAELASMELNESSRWTEEMETAKKGLLEHGRNWSAIARMVSGTYSQCK 650
Db 8 NLEDIYTLCSSTMESEMDFDGL--EDDDTKSDSILEDSTIFVAFKGNIDDK----- 60
QY 651 NFVFNKQKQNLDEIL-----QOHLKMEKER--NARRKKKAPAAAEEAAPPV 699
Db 61 ---FKWK---LDAILKXVPLNLLHMESSKLKQKVEPWNSVRVTWNI PREAAERLILAQ 113
QY 700 VDEENEAASGVSGNEEMVEAEALHASNEVPRGECGPATVNNSSDTEISPTPTEAA 759
Db 114 SNNQQLRDLGILLSVQIE-GECAINLALAQNRSDVRMNGPMGAGNSVRMEA-GFPMASGP 171
QY 760 KTGQNGPK---PP-----ATLGADGPPP--GPPTPPRTSRAPTEP-----TPASE 801
Db 172 GIIRMNPNATWIMPPGCVSSMMAPGNPELPQRTTPRPAOSODAMDPLLSGLHIQQOSH 231
QY 802 ATGATPPPPAPSP-----SAPPVVPVPEKEBEETAAPVVEGEQKPPAAEBELAVDTG 856
Db 232 PGGSLAPPHHPMQPVSVNQMPANFPOLQOQOQOQOQOQOQOQOQOQOQOQOQOQOQOQ 291
QY 857 KAEPVYKSECTEEAEGPAKGDAAEAEATAEGALKAEKKGSGRATTTA---KSSGAPQ 913
Db 292 QQHQQOQOQOQIRPQFTAPTQVPPVPGWNOLPFGALQPPPAQGLSGTWTANQGWKAPLP- 350
QY 914 DSDSSATCSADEVDEAEGGDKRLLSPRPSLLTPTGDPANASPOKPLDLKQKORAAAI 973
Db 351 -----GPMOQOQLOAREPLAT----- 365
QY 974 PPIQVTKVHEPREDAAPTKPAPPAPPQONLOPESDAPQO-PGSSPRGKRSRAPPADK 1032
Db 366 --VQT-----PSHPPPPYPFGSQOASQAHTNFPQMSNPGQFTAP----- 402
QY 1033 EAFAAEAQKLPDPPCWTSGLPVPPVPREVIKASHAPDPSAFSY-APPGHPLPLGLHDT 1091

NAME: Cserr, Luann
REGISTRATION NUMBER: 31,822
REFERENCE/DOCKET NUMBER: GI 5190
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 876-1170
TELEFAX: (617) 876-5851
INFORMATION FOR SEQ ID NO: 60:
SEQUENCE CHARACTERISTICS:
LENGTH: 1320 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 60:
US-10-124-557-60

Query Match 3.2%; Score 425.5; DB 13; Length 1320;
Best Local Similarity 21.2%; Pred. No. 3.1e-11;
Matches 261; Conservative 127; Mismatches 491; Indels 355; Gaps 53;

QY 508 QOQMPRSSQEEKDEKEAEKEEKEPEVNDKEDLLKEK-----TDDT-SGEDND 559
DB 93 KRSPKP-----PNKKTKKVIIESEBITEVKDNKKNRKTKKTPKPPVVDVDEAGSLDNG 145
QY 560 EKEAVASKGRKTANSQGRKRGRITRSMANEEAEIATP-QQSAEASLWELNESSRWTEE 618
DB 146 DFKVTPDTSTTQHNKYSTSPKIT--TAKPINRPSLPNSDTSKETSLSLVNKEITVETK 203
QY 619 EMETAKGGLLEHGRNNSAIARMWKSIVSCKNFYFNKKRONLDELQOHLKME--K 675
DB 204 ETTTNNQSTDGKEKTSKAKETQSIKTSKADL-----APTSKVLAKPTPKAETTK 256
QY 676 ERNARRKKKAPAAAEAEAFPPVVEDEEAEASGVSGNEBEMVEAEALHASGNEVPRGE 735
DB 257 GPALTTPKEPTTPKEPASTTP-----KEPT-- 263
QY 736 CSGPATVNNSSDTEISPSHTEAAKDTGQNGKPPATLGADGPPGPTPPRPTSRAPIE 795
DB 284 ---PTTIKSAPPTPKAPATTTKSAPTTKAPATT--KEPAPTTKAPATTKE 335
QY 796 PTPASEATGATPP--PAPSPSAPPVVPVPEEKEEBETAAPVPEEGEQQKPPAAAEIAY 853
DB 336 PAPT--TKSAPTTKAPATTPKKAPATTPE--PAPTTPKEPTTPPKAPATTKEPAP 392
QY 854 DTGKABEPVKSCTEAEAGPAKGAEEAEATAEGALKAEKKEGGSGRATTAKSGAPQ 913
DB 393 TTPKEAPT-----APKAPATTTPKEPATTTPKEPATTKE-----PSPTTPKEPAPT 441
QY 914 DSDSSATCSADEVDEAEAGGDKNRLSPRSLTFTGDPANASPOKPLDLKQLKQRAAAI 973
DB 442 TTKSAPTTTKEP-----APTITKSAPTTTKEP----- 468
QY 974 PPIQVTKVHEP-----PRED--APTKEPAPPPPPQNLQESDAPQPGSSPRGKSRSPA 1027
DB 469 ---SPTTKEPAPPTPKAPATTTPKAPATTTPKEPATTTPKEPATTTPKAPATTAPKBP 525
QY 1028 PPADKAAFAAEAKLPGDPP-----CWTSGLPFPVPPREVIVKASPHADPSAFSVADPGHP 1083
DB 526 PTPPKETAPTTPKLLPTTTEKLAPTTPKEPAPTPEELAPTTPEETPTT-----PEEP 580
QY 1084 LPLGLHDTARVLPFRPTTISNP--PPLISSAKHPSVLEROIGAISQGSVOLHVPYSEHAK 1142
DB 581 APT--TPKAAAPNTPKAPATTTPKEPATTTPKEP-----PTTPKET 620
QY 1143 AP-----VGPVTMGLPLPMDPKKLAPFSGVKQQLSPRGQAGPPESLG-----VPTAQEASV 1194
DB 621 APTTPKGTAPTTLKEPAPTTPKAPAP-----KELAPTTTKEPTSTTSKAPATTTP-- 670
QY 1195 LRGTALGVSFGSITTKGIPSTRVPSDAITVRSITHTGTPADVLYKGTITRIIGEDSPSR 1254
DB 671 -KGTA-----PTI--PKAPATT-----TPKEPAPTTPKGTAPTTLKEPAPT 709
QY 1255 LDRGREDSLPKGHVIVBGKKGHVLSYEGGMSVTCQSKEDGRSSGPPPHETA--APKRTYD 1312

DB 710 PKPAPKELAP-----TTTKGPTSTT-----SDKPAPTTPKETAPTTPKEPAP 752
QY 1313 MMEGRVGRAISSASIEGLMGAIPP---ERHSPHLKQHHIRGSITQGIPIRSYVEAQED 1369
DB 753 TTPKPKAPTTPEPT-----PPTTSEVSTPTTTTKEPTTIHKSPPDESTPE----- 795
QY 1370 YLREAKLLKREGTP-----PPPPPSRDLTEAYKQALGPLKLPKPAHEGLVATVKEAGRS 1424
DB 796 -----LSAETPKALENSPKPEGVPTTKT-----PAATKPE---MTTAKD--- 833
QY 1425 IHEIPREEARHTE-LPLAPRPLKEGSIT-----QGTPLKYDT 1461
DB 834 --KTTERRDLRTTPTTTTAAAPKMTKETATTTEKTESKLTATTQVTSITTTQDTPPKITT 891
QY 1462 GAS-----TTGSKKHDRSLGSPGRTFPPVHPLDVMDADARALRACRYEESLKSRPGT 1514
DB 892 LKTTTLAPKVTTTKTITTEINMKPEET-----AKPKDRTNSKATTPKPOK 939
QY 1515 ASSSGGS--IARGAPVIVPELGKPRQSPPLYVEDHGAPFAGHLPRGSPVTMRE--PTPRLQE 1571
DB 940 PTKAPKKPTSTKKPKTMPRVKPKTTP-----TPRKMTSTMPELNPTSRIAE 986
QY 1572 GSISSS---KASODRKL-----STPREIAKSPHSTVPEHHPH---PISP 1610
DB 987 AMLQITTRPNQTPNSKLVENVNPKSEDAGGAETPHMLLR-PHVFWPEVTPDMDYLDPRVP 1045
QY 1611 YEHLRGVSGVDLYRSHIPLAFDPTGIPRGIPLD 1644
DB 1046 NQGIIN-----PMLSDETNICNGKPYD 1068

RESULT 34
US-10-124-557-40
Sequence 40, Application US/10124557
Publication No. US20020137894A1
GENERAL INFORMATION:
APPLICANT: Turner, Katherine
Clark, Stephen C.
Jacobs, Kenneth
Hewick, Rodney M.
Genser, Thomas G.
TITLE OF INVENTION: Megakaryocyte Stimulating Factors
NUMBER OF SEQUENCES: 143
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genetics Institute, Inc.
STREET: 87 CambridgePark Drive
CITY: Cambridge
STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/124,557
FILING DATE: 16-Apr-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/643,502
FILING DATE: 18-JAN-1991
APPLICATION NUMBER: US 07/546,114
FILING DATE: 29-JUN-1990
APPLICATION NUMBER: US 07/457,196
FILING DATE: 29-DEC-1989
APPLICATION NUMBER: US 07/390,901
FILING DATE: 08-AUG-1989
ATTORNEY/AGENT INFORMATION:
NAME: Cserr, Luann
REGISTRATION NUMBER: 31,822
REFERENCE/DOCKET NUMBER: GI 5190
TELECOMMUNICATION INFORMATION:

```

;
; TELEPHONE: (617)876-1170
;
; TELEFAX: (617)876-5851
;
; INFORMATION FOR SEQ ID NO: 40:
;
; SEQUENCE CHARACTERISTICS:
;
; LENGTH: 1361 amino acids
;
; TYPE: amino acid
;
; TOPOLOGY: linear
;
; MOLECULE TYPE: protein
;
; SEQUENCE DESCRIPTION: SEQ ID NO: 40:
US-10-124-557-40

```

Query Match	3.2%; Score 425.5; DB 13; Length 1361;
Best Local Similarity	21.2%; Pred. No. 3.2e-11;
Matches 261; Conservative 127; Mismatches 491; Indels 355; Gaps 53;	
QY	508 QOQMPRSSQBEKDEKEKEAEKEEKEKPEVENDKEDLLKEK-----TDDT--SGSDND 559
DB	134 KRSEKP-----PNKKYTKVIESEBITEVKDNKNRTKKKTPKPPVDEAGSLDNG 186
QY	560 EKEAVASKGRKTANSQGRKRITRSMANSEEAITP--QOSABLAMELNESSRWTEE 618
DB	187 DFKVTTPTDTSTQHNKVSTSPKIT--TAKPINRPSLPPNSDTSKETSATVKNKETTVEVK 244
QY	619 EMETAKGLLEHGRNWSAIRMVGSKTVSCKKNFYFNKKRQNLDELILQOHLKME--K 675
DB	245 ETTTNNKQTSIDGKEKTTSAKETQSIKTSKOL-----APTSVKLAKPTPKAETTTK 297
QY	676 ERNARRKKKAPAAAASEEAFPPVVEDEEMEASGVSGNEBMEVBEAEALHASGNVEPRGE 735
DB	298 GPALTTPKEPTPTTPKEPASTTP-----:-----KEPT-- 324
QY	736 CSGPATVNNSSDTSIESPHTEAAKOTGONGKPKPATLGADGPPGPTTPPRTSRAPIE 795
DB	325 ---PTTIKSAPTTPKBPAPTTTTSAPTTPKBPAPTTT---KEBPAPTTPKBPAPTTTKE 376
QY	796 PTPASEATGAPTP--PAPSPSAPPVVPKKEKEEETAAAPPVVEEGEOKPPAAEELAV 853
DB	377 PAPTT--TKSAPTTPKBPAPTTPKKBPAPTTTKE--PAPTTPKBPPTTTPKBPAPTTKEPAP 433
QY	854 DTGKAEDFPVKSECTEEAEEGPAGKDAEABAEATAEGALKAKEKGGSGRATTAKSSGAP 913
DB	434 TTPKEPAPT-----APKKPAPTTPKBPAPTTTPKEPAPTTTKE---PSPTTPKBPAPT 482
QY	914 DSGSATCSADEVDEAGGDKNRLLSRPSLLTPTGDPANASQKPLDLKQLKORAAAI 973
DB	483 TTKSAPTTTKEP-----APTITKSAPTTTKEP----- 509
QY	974 PPIQVTKVHEP---PREDA--APTKPAPPAPPQNLQPEDSAPQOGSSPRGKSSPA 1027
DB	510 ---SPTTTKEBPAPTTPKBPAPTTPKKBPAPTTTPKEPAPTTTPKEPAPTTTKBPAPTAKEPA 566
QY	1028 PPADKEAFAAEAOALPGDPP---CWTSGLPFPVPPREVIKASPHADPDPSAFSYPGCHP 1083
DB	567 PTPPKETAPTTPKKLTPTTPEKLAPTTPEKAPPTPEELAPTTDEEPTPTT----PEEP 621
QY	1084 LPLGLHDTARPVLPRPTISNP--PPLISSAKHPSVLEROIGAISQGMVQLHVPYSYHAK 1142
DB	622 APT--TPKAAAPNTPKBPAPTTTPKEPAPTTTKEPA-----FTTPKET 661
QY	1143 AP-----VGPVTMGLPLPMDPKKLAPSGVKQEQLSPRGAGPPESLG---VPTAQEASV 1194
DB	662 APPTPKGATPTTLKEPAPTTTPKBPAP-----KELAPTTTKEPTSTTSXDPAPTTP---- 711
QY	1195 LRGTALGSVFGSITTKGIPSTRVPSDSAITVRGSIITHGTADVLYKGTITRIIGEDSPSR 1254
DB	712 -KGTA-----PTT--PKBPAPT-----TPKEPAPTTPKGAPTAPTLKEPAPTT 750
QY	1255 LDRGREDSLPKGHVIEGKKGHVLSYEGGMSVTQCKSEGGSSGPPHETA--APKETYD 1312
DB	751 PKKBPAPKELAP-----TTTKGPTSTT-----SOKPAPTTTPKEAPTTPTPKEPAP 793
QY	1313 MMEGRVGRAISSASIEGLMGRAIIPP---ERHSPHHLKEOHHSIGTSIQGIPRSVVEAQED 1369

```

RESULT 35
US-10-042-865-12
; Sequence 12, Application US/10042865
; Publication No. US20040029216A1
; GENERAL INFORMATION:
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Li, Li
; APPLICANT: Zerhusen, Bryan D
; APPLICANT: Casman, Stacie J
; APPLICANT: Shenoy, Suresh G
; APPLICANT: Spytek, Kimberly
; APPLICANT: Zhong, Mei
; APPLICANT: Gangolli, Esha A
; APPLICANT: Burgess, Catherine E
; APPLICANT: Patturajan, Meera
; APPLICANT: Vernet, Corine A.M
; APPLICANT: Taylor, Sarah
; APPLICANT: Tchernev, Velizar T
; APPLICANT: Miller, Charles E
; APPLICANT: Guo, XiaoJia
; APPLICANT: Boldog, Ference L
; APPLICANT: Grosse, William M
; APPLICANT: Alsobrook II, John P
; APPLICANT: Gerlach, Valerie L
; APPLICANT: Edinger, Shlomit R
; APPLICANT: Rothernberg, Mark E
; APPLICANT: Ellerman, Karen
; APPLICANT: MacDougall, John
; APPLICANT: Malyankar, Uriel M
; APPLICANT: Millet, Isabelle
; APPLICANT: Peyman, John
; APPLICANT: Smithson, Glennda
; APPLICANT: Gunther, Erik
; APPLICANT: Stone, David
; TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
; TITLE OF INVENTION: Using the Same
; FILE REFERENCE: 21402-537
; CURRENT APPLICATION NUMBER: US/10/042,865
; CURRENT FILING DATE: 2002-05-17
; PRIOR APPLICATION NUMBER: 60/260,417
; PRIOR FILING DATE: 2001-01-09
; PRIOR APPLICATION NUMBER: 60/260,831
; PRIOR FILING DATE: 2001-01-10
; PRIOR APPLICATION NUMBER: 60/272,338
; PRIOR FILING DATE: 2001-02-28
; PRIOR APPLICATION NUMBER: 60/274,876

```


1588 QY TPREI-----AKSPHSTVPEHHHPISPYEHLRG-----VSGVD 1622
1565 Db VPLKALTGRVDSGTEKFGVLAPE--SPVRKSPSEYKLEGRSVSCLEPIEGTLDIALLSGPQ 1623
1623 QY LYSHIP---LAFDPT-----SIPRGIEL-----DAAAYYL-PRHLAPNPTPHLY 1665
1624 Db ASKTELPSPSAQSPSPGSDVRASVPLVSSGKNDTTSARELSFSSLMKMSY--LL 1681
1666 QY PLYLRGYPDTAALENQRTII---NDYITSQOMHNTA-----TAMAQRADMLRGLSPRES 1718
1682 Db EPWFL---PPSRGLONSPASVLPDPPEFKDRKGPHTARSPGVTMESNPQOREGSSPKHQ 1738
1719 QY SLALNVAAGRGIIIDLSQVPHLPVLVPPPTGTATAMDRLAYLPTAPQPPFSRHSPLS 1778
1739 Db DHTTDPKLLTCLQNLHSPDLARP-----RCPLP 1767
1779 QY PGGPHLTLPKPTTSSSER-----EDRDR-----EDRDREREKSL-- 1815
1768 Db PEASPSREKPLGESSERGPTARSESAARADTCREPSMELCFPETAKTSDNSKNLLSV 1827
1816 QY TSTTTVEHAPIWRPGTEOSSGSGSGSGSSRSPASHAHQHSPISPR 1867
1828 Db GRTHPDFYTOAMEKA--WAPG-----GKTNHKGFG--EARPPRDNSLSHAGIPCE 1878
1868 QY QDALQORPSVLHNTGMKGIITAVEPSKPTVLRSTSTSSVVRPAATPPATHCPGLGTLDG 1927
1879 Db KELGKVR-----RGVEKPEALLARRSLQ-----PPGIESEKSEKLSS 1916
1928 QY VYPTLM-----EPVLLPKEAPRVARPER-PRATGHAFLAKPPAR-----SGLEPA 1972
1917 Db FFSLOKOGAKEPE--RKEQFLORHPSSIPLPPLTAKDLSPPAARQCSPSHASGREGP 1973
1973 QY SSPS---KGSEPRPLVPVSGHATIAITPAKNLAPHIASDPPAPPASADPHREKTOSK 2029
1974 Db AKSTAEPSPPDPKPVAAHS-----ESSHKPRGPDGPPGPKTKHPDRSLSSQK 2025
2030 QY PFSI-----QELBLSLG---YHGSSYSPEG--VEPVSPVS-----SPSLTHDKLGPKLE 2075
2026 Db P-SVGATKGKEPATOSLGSSREGKSHSGSDVPFATPGSQNKASDGICQGGGSPVPL 2084
2076 QY ELKSHLEGELRPQPG-PVKLGEEAHLPHLPSPESQSSPPLLOTAPGVGHQHVVT 2134
2085 Db HTDRAPLDAKPOPTSGRPLVLEKPVHLPRPGHPGSPADQKL--SAVGEK----- 2135
2135 QY LAQHSIVITQDTRHHPOQLSAPLPAPLAFPGASCVPDLDR---RPPSDLVLPDPDHG 2191
2136 Db -----QTLSPKHPK-----PSTVKDCP--TLCKQTDNRQTKSPSQ----- 2169
2192 QY APARGSPHSGGKRSPB-----PNKTSVLGGGEDGIEPVSPPEGMTEPGHSRSVYPLLYR 2247
2170 Db PAANTDRRAEGKKCTEALYAPAEQDKLEAGLSFVHSENRLKGAERPAAGVGKGF----- 2224
2248 QY DGSQTEPSRMGSKSPGNTSOPPAFFSKLTSSNGAMVSKKQKINKLNTNHNPEPNIS 2307
2225 Db -----EARGKGFG--POKPP-----TEAD-----KPNGMKRSP----- 2250
2308 QY QPGTEIFNMPAITCTGLMVTYSQAVQEH-----ASTNMGLEALIRKALMGKYDQWESPP 2363
2251 Db -----SATOSSFRSTALPEKSLSCSSFPETRAGVREASAASSD----- 2290
2364 QY SANAFNPLNASLPAAMPITAADGRSDHTLTSPGGGKG-----AKVSGRPSR----- 2412
2291 Db -----TSSAAGGMLELPAPSNERDHRKAQAPAGEGRTHMTKSDSLPSFRVSTLP 2342
2413 QY -----KAKSPAPGLASGRDRPPSVSVHSEGDNRTP 2445
2343 Db HHPDPTMGASHDRDRLSVTATVGETKGDPAPA-----QPAPARKQNVGRDVTKPSA 2397
2446 QY TNRWEDRPS 2456
2398 Db PN---TDRPIS 2405

RESULT 38
US-10-124-557-104
; Sequence 104, Application US/10124557
; Publication No. US20020137894A1
; GENERAL INFORMATION:
; APPLICANT: Turner, Katherine
; Clark, Stephen C.
; Jacobs, Kenneth
; Hewick, Rodney M.
; Gesner, Thomas G.
; TITLE OF INVENTION: Megakaryocyte Stimulating Factors
; NUMBER OF SEQUENCES: 143
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genetics Institute, Inc.
; STREET: 87 CambridgePark Drive
; CITY: Cambridge
; STATE: Massachusetts
; COUNTRY: U.S.A.
; ZIP: 02140
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/124,557
; FILING DATE: 16-Apr-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/643,502
; FILING DATE: 18-JAN-1991
; APPLICATION NUMBER: US 07/546,114
; FILING DATE: 29-JUN-1990
; APPLICATION NUMBER: US 07/457,196
; FILING DATE: 29-DEC-1989
; APPLICATION NUMBER: US 07/390,901
; FILING DATE: 08-AUG-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: Cseri, Luann
; REGISTRATION NUMBER: 31,822
; REFERENCE/DOCKET NUMBER: GI 5190
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617)876-1170
; TELEFAX: (617)876-5851
; INFORMATION FOR SEQ ID NO: 104:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1140 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 104:
US-10-124-557-104

Query Match 3.2%, Score 423; DB 13; Length 1140;
Best Local Similarity 21.1%; Pred. No. 3.4e-11;
Matches 269; Conservative 133; Mismatches 512; Indels 360; Gaps 57;

QY 476 NENYKSLVRSYRRGKSKQ-----QQQQQQQQQQQQQQQPMPSQQEKKDEKE 524
Db 126 SQTIKTSRKSPKPNKKTKKVIIEEITEHSVNSQSSSSSSSSSTLWKTKSS 185
QY 525 KEKEAKE--EKEPEVNDKEDLLKEK-----TDDT-SGEDNDEKAVASKGRKTANSQ 575
Db 186 KNSAANRELQKLLKVKDNKNKRTKPKTPPVVDEAGSLDNGDFKVTTPDITSTTQHNK 245
QY 576 GRKGRGTRISMANESEEAITP-QQSALASMELNESSRWTEEMETAKKGLLEHGRNW 634
Db 246 VSTSPKIT--TAKPINRPSLPNSDTSKETSITVNETTETTKTTTNTKQTSIDCKEK 303
QY 635 SAIRAMVGSKTVSQCKNFYFNKRNQLDILQOHKLKME---KERNARKKKKAPAAAS 691
Db 304 TTSAKETQSIEKTSKDL-----APTSKVLAKPTPKAETTTTKGPALTTPKEPTPTPK 356


```
QY 846 PAABELAVDTGKAEPPVKSCTBEAEGPAKGGKDAEAAEATACALKAEEKGGSGRAATT 905
Db 379 PTTKEPAPTTKGPAPTT-----APKKPAPTTKPEAPTTKPEAPTTTKE-----PSPT 427
QY 906 AKSSGAPQDSDSATCSADEBAEGDKNLLSPRSLTPTGCDPRANASPOKPLDLKQ 965
Db 428 TPKEPAPTTKSAPTTTKEP-----APTTKSAPTTTKEP-----462
QY 966 LKORAAAIPPIQVTKVHEP-----PREDAA--APTKPAPPPPPQNLQPEDSAPQOQGGSP 1019
Db 463 -----SPTTTKEPAPTTKPEAPTTKPKAPPTTKEPAPTTKPEAPTTTKEPAPTTTKKPA 511
QY 1020 RGKSRPAPADKEAFAEAQKPGDPP-----CWTSGLPFVPPPREVIKASHPAPPSAF 1075
Db 512 PTAPKEPAPTTKETAAPTTPKGLTPTTPEKLAPTTPEKAPTTPEELAPTTPEEPTPTT- 570
QY 1076 SYAPPGHPLGLHDTARVPLPPPTISNP--PPLISSAKHPSVLERQIGAISQMSVOLH 1134
Db 571 -----PEEPAPT--TPKAAAPNTKPEAPTTKPEAPTTKPEA-----607
QY 1135 VPYSEHAKAP-----VGPVTMGLPLPMDPKLAPFGVGKQEQLSPRGQAGPPESLG---V 1186
Db 608 -PTTKPETAPTTKGTAPTTLKPEAPTTKPKAP-----KELAPTTTKEPTSTTSKPA 660
QY 1187 PTAQEAASVLRGTALGVSFGGSIITKIPSTRVPSDSALTYRGSTHGTTPADVLYKGIITRI 1246
Db 661 PTPP-----KGTA-----PTT--PKPEAPT-----TPKEPAPTTKGTAPT 695
QY 1247 IGDSPSRLDRGREDLSIPKGVHIEGKKGHVLSEVGMSVTCQSKEDGRSSGPPHETA- 1305
Db 696 LKEPAPTTKPKAPKELAP-----TTTKGPTSTT-----SDKPAPTTTPKETAP 738
QY 1306 -APKRTYDMMEGRVGRAISSAIEGLMRAIPP-----ERHSPHHLKEOHIRGSIITQIPR 1361
Db 739 TTPKEPAPTTKPKAPPTTPTP-----PPTTSEVSTPTTKEPTTIHKSPDESSTPE 789
QY 1362 SYVEAEDYLREAKLLKRGTP-----PPPPSRDLTEAYKQALGPKLKAHAELVA 1416
Db 790 -----LSAEPPTKALENSPKERGVPTTKT-----PAATKPE---MTT 823
QY 1417 TVKEAGRSIHEIPREELRHTE-LPLAPRLKEGSIIT-----Q 1453
Db 824 TAKD-----KTERDLRTTPTTTAAPKMTKETATTTETKTSKITATTQTSTTTQD 877
QY 1454 GTPKLYDTGAS-----TTGSKKHVRSILGSPGRTPFPVPHLDVMDARALERACYEE 1506
Db 878 TTPFKLTTLTKTTLAPKVTTTKTITITTEIMNKEET-----AKPKDRATNSK 925
QY 1507 SLKSRPGTASSGGS-IARGAPVIVELGKPRGOSPLTYEDHGAPFAGHLPRGSPVTMRE- 1564
Db 926 ATTPKQKPTKAPKKTSTKKKTMPRVRKPKTTP-----TPKMTSTMPLEL 972
QY 1565 -PTPRLOEGSLSS-----KASQDRKLT-----STPREIAKSPHSTVPEHHPH 1606
Db 973 NPTSRIAEAMLQTTTRNPOTNSKLVEVNPKSDAGAGETPHMLLR-BHVFMTPEVTPD 1031
QY 1607 ----PISPYBHLRGVSGVDLYRSHIPLAFDPTSIPRGIPLD 1644
Db 1032 MDVLPVNPQGIIN-----PMLSDETINICNGKVD 1062
```

RESULT 42

```
US-10-221-625-15
; Sequence 15, Application US/10221625
; Publication No. US20040033942A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.
; APPLICANT: HILLMAN, Jennifer L.
; APPLICANT: BAUGHN, Mariah R.
; APPLICANT: YUE, Henry
; APPLICANT: LAL, Preeti
; APPLICANT: LU, Dyoung Aina M.
; APPLICANT: PATTERSON, Chandra
```

```
; APPLICANT: AZIMZAI, Yalda
; APPLICANT: BANDMAN, Olga
; APPLICANT: TANG, Y. Tom
; APPLICANT: MATHUR, Preete
; APPLICANT: SHAH, Purvi
; APPLICANT: AU-YOUNG, Janice
; APPLICANT: REDDY, Roopa
; TITLE OF INVENTION: TRANSCRIPTION FACTORS
; FILE REFERENCE: PF-0761 PCT
; CURRENT APPLICATION NUMBER: US/10/221,625
; CURRENT FILING DATE: 2001-03-13
; NUMBER OF SEQ ID NOS: 214
; SOFTWARE: PERL Program
; SEQ ID NO 15
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20040033942A1 879500CD1
; US-10-221-625-15
```

```
Query Match 3.2%; Score 418; DB 12; Length 1828;
Best Local Similarity 19.8%; Pred. No. 1e-10;
Matches 402; Conservative 211; Mismatches 719; Indels 694; Gaps 80;
```

```
QY 687 PAAASEAAFPVVEDEMEASGVSGNEEMVEEAEALHASGNEVPRGCGSPATVNNSS 746
Db 40 PSSLPGPASPMPIPNSSPLASPVSTVS--VPLSSSLPISVPTTLPAASAPLTI---- 93
QY 747 DTESIPSPHTEAKD-----TGQNGPKPPATLGDAGPPPPGPT-----PP 786
Db 94 ---PISAPLTVSAGSALLTSVTPPLAPVVVPAAPGPPSLAPSGASPSASALTGLATAPS 150
QY 787 RRTSRAPLEP-----TPASEATCAPPPP-----APSPSAP---PPVVPKEE 826
Db 151 LSSSQTPGHLLAPTTSSHVPLGNSVTVAPACSVLPVASALAGFFPSAPNAPPLAPLV 210
QY 827 KEBETAAAPVEGEQKPPAAEELAVDTGKAS--EPVKSECTBEAERG-----PAK 876
Db 211 LAPSPGAPVLAASQTPVPVWMAPSSTPTGSLASASVPAPTPVLSPSTQTMPLPVPSP 270
QY 877 GKDAEAAETAEGALKAEEKGGSGRATTAKSSGAPQDSDSATCSADEVEAEGGDKNR 936
Db 271 LPSPASTQTALAPALAPLAPTLGGSSPSQTLGNTGNGQPPPTQTL-----316
QY 937 LLSPRSLTPTGCDPRANASPOKPLDLKQLKQAAAIPPIQVTKVHEPPREDAPTKPAP 996
Db 317 -LTPASSLV-PTPAQTLAPGPPPLGPTQTLSLAPA-PPL-----APASVPG 360
QY 997 PAPPPPQNLQP-ESDAPQPGSSPRGKSRSPAP-----PADKEAFAEAQ 1040
Db 361 PAPAHTLTAPASSSALLAPASVQTLTSLPAPVPLGPAAQTLALAPASTQSPASQAS 420
QY 1041 KLPGDPPCWTSGLPFPV-----PPREVIKASHPAPPSAFSYA-----1078
Db 421 SLVVSA---SGAAPLPVTVMSRLPVSKDEBDTTLTSGPPSPSTATSGGPRPRQPPP 477
QY 1079 PPGHPLPLGL-----HTARVLP 1097
Db 478 PPRSPFYLDLSLEEKRRQRSELERIFOLSEAHGALAPVYGVTEVDFCTTLPQPVASPIG 537
QY 1098 RPTTISNPP-PLISSAKHPSVL--ERQIGAISQMSVOLHV-----PYSEHAKAPVGP 1147
Db 538 RSPGSPHTFTWYTEAAHRAVLFPQORLDQLSIIERFIWMPDVEAPPPSLHACHP--- 594
QY 1148 VTMGLPLPMDPKKLAPFGVGKQEQLS-----PROQ-----AGPP 1181
Db 595 -----PPWLA PRQAFAQEQSLASELWPRAPLHRIVCNMRTQFPDLRLIYDCGKL 644
QY 1182 ESLGV-----PTAQEASVLRGTALG-----SVFGSITKGISTRVPSOSATYR- 1226
Db 645 QTLAVLLRLQKAEGRHVLIFTQWTRMLDVLEQFLTYHGLYLRLDGSTRVEORQALMERF 704
```



```
; APPLICATION NUMBER: US 07/390,901
; FILING DATE: 08-AUG-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: Cseri, Luann
; REGISTRATION NUMBER: 31,822
; REFERENCE/DOCKET NUMBER: GI 5190
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617)876-1170
; TELEFAX: (617)876-5851
; INFORMATION FOR SEQ ID NO: 58:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1049 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 58:
US-10-124-557-58

Query Match          3.2%; Score 416.5; DB 13; Length 1049;
Best Local Similarity 21.2%; Pred. No. 6.1e-11;
Matches 264; Conservative 128; Mismatches 503; Indels 349; Gaps 56;

QY 495 QQQQQQQQQQQQQQQMPRSSQOEKDEKEKEBAEK-EEKPEVENDKEDLLKEK-----549
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
65 EEHSVENQESSSSSSSSSSSTIWKIKSKNSAANRELQKLVKDKNKNRTKKKPTPK 124
QY 550 ---TDDT-SGEONDEKEAVASKRKTANSQGRKKGHITRSMANEANSEEAITP-QQSABL 604
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
125 PPVVDAGSLONGDPKVTPPTSTTQHKNVSTSPKIT--TAKPINRPSLPPNSDTSKE 182
QY 605 ASMELNESSRTEEBEEMETAKGLLEGRNWSALARMVSGKTVSQCKNFYFNKKRONLDE 664
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
183 TSLTVNKEITVETKETTTNTKNTSTDGKEKITSAKETQSIKTSAKDL-----APTSK 235
QY 665 ILQQKHLKWE---KERNARKKKKAPAAASEAAFPVVDSEMEASGSGNEEMVEEA 721
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
236 VLAQPTPKAETTKGPAALTTPKEPTTTPKEPASTTP-----272
QY 722 EALHAGNEVPREGCSGPATVNSSDTEISPSHTEAAKDTGQNGPKPATILGADGPPPG 781
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
273 -----KEPT-----PTTKSAPTTPKPEAPTTTKSAPTTTPKEPAPTTT-----KEPA 314
QY 782 PTPPRTSRAPTEPTPASEATGAPTPP--PAPPSAPPPVVPVPEKEEETAAAPVVEE 839
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
315 PTPKEPAPTTTPKEPAPTT-TKSAPTTTPKEPAPTTTPKPAITPKPKE--PAPITPKPTPT 371
QY 840 GEEQKPPAAEELAVDTGKAEEVPKSETEAEBGPAKGKDAEAAEATAEGALKAEKKEGG 899
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
372 TPKEPAPTTTPKEPAPTTTPKEPAPT-----APKKPAPTTTPKEPAPTTTPKEPAPTTTKE-- 422
QY 900 SGRATTAKSSGAPQDSSSATCSADEVDEAEGGDKNRLSPRSLTPTGDPANASPOK 959
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
423 --PSPTTPKEPAPTTTKSAPTTTKEP-----APTTTKSAPTTTPKE 460
QY 960 PLDLKOLKORAAAIPPIQVTKVHEP----PREDL--APTKEPAPPPPPQNLPQESDAFQ 1013
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
461 P-----SPTTKPEPAPTTTPKEPAPTTTPKPAITTPKEPAPTTTPKEPAPT 504
QY 1014 QGSSSPRGRSPAPPADKEAFAAEAQKLPDPP-----CWTSGLPVPVPPREVIVKASPHA 1069
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
505 TTKKPAFTAPKPAFTTPKETAFTTPKGLTPTTPEKLAFTTPEKPAFTTPEELAPTTTPE 564
QY 1070 PPSAFSYPAGHPLPLGLHDTARVLP RPPTISNP-PPLISSAKHPSVLERQIGAISQ 1128
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
565 PTPTT-----PREPAT-TPKAAAPNTPKPEAPTTTPKEPAPTTTPKEPAPTT----- 606
QY 1129 MSVLHVPVYSEHAKP-----VGPVTMGLPLPMDPKLAPFGCVKQEQSLSPRQAGPPPS 1183
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
607 -----PTTPKETAFTTPKETAFTTPKGLTPTTPEKLAFTTPEKPAFTTPEELAPTTTPE 653
QY 1184 LG---VPTAQEASVLRGALGVGPGSITKTPSTVPDSALITYGSIHTGHTPADVLVK 1240
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
654 TSDKPAFTTP-----KGTA-----PTT--PKPEAPT-----TPKEPAPTTTPK 688
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RESULT 45

US-10-042-865-79

; Sequence 79, Application US/10042865

; Publication No. US20040029216A1

; GENERAL INFORMATION:

; APPLICANT: Padigar, Muralidhara

; APPLICANT: Li, Li

; APPLICANT: Zerhusen, Bryan D

; APPLICANT: Casman, Stacie J

; APPLICANT: Shenoy, Suresh G

; APPLICANT: Spytek, Kimberly

; APPLICANT: Zhong, Mei

; APPLICANT: Gangoli, Esha A

; APPLICANT: Burgess, Catherine E

; APPLICANT: Patturajan, Meera

; APPLICANT: Vernet, Corine A.M

; APPLICANT: Taylor, Sarah

; APPLICANT: Tchernev, Velizar T

; APPLICANT: Miller, Charles E

; APPLICANT: Guo, Xiaojia

; APPLICANT: Boldog, Ference L

; APPLICANT: Grosse, William M

; APPLICANT: Alsbrook II, John P

; APPLICANT: Gerlach, Valerie L

; APPLICANT: Edinger, Shlomit R

; APPLICANT: Rothenberg, Mark E

; APPLICANT: Ellerman, Karen

; APPLICANT: MacDougall, John

; APPLICANT: Malyankar, Uriel M

; APPLICANT: Millet, Isabelle

; APPLICANT: Peyman, John

; APPLICANT: Smithson, Glennda

; APPLICANT: Gunther, Erik

; APPLICANT: Stone, David

; TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of

; FILE REFERENCE: 21402-537

; CURRENT APPLICATION NUMBER: US/10/042,865

; CURRENT FILING DATE: 2002-05-17


```

;
; COUNTRY: U.S.A.
; ZIP: 02140
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/10/124,557
;   FILING DATE: 16-Apr-2002
;   CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US 07/643,502
;   FILING DATE: 18-JAN-1991
;   APPLICATION NUMBER: US 07/546,114
;   FILING DATE: 29-JUN-1990
;   APPLICATION NUMBER: US 07/457,196
;   FILING DATE: 29-DEC-1989
;   APPLICATION NUMBER: US 07/390,901
;   FILING DATE: 08-AUG-1989
; ATTORNEY/AGENT INFORMATION:
;   NAME: Caetr, Luann
;   REGISTRATION NUMBER: 31,822
;   REFERENCE/DOCKET NUMBER: GI 5190
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (617)876-1170
;   TELEFAX: (617)876-5851
; INFORMATION FOR SEQ ID NO: 44:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 1270 amino acids
;     TYPE: amino acid
;     TOPOLOGY: linear
;     MOLECULE TYPE: protein
;     SEQUENCE DESCRIPTION: SEQ ID NO: 44:
;
; US-10-124-557-44
;
; Query Match 3.1% Score 410; DB 13; Length 1270;
; Best Local Similarity 21.0%; Pred. No. 1.5e-10;
; Matches 262; Conservative 128; Mismatches 489; Indels 368; Gaps 54;
;
; QY 515 SSQF-----EKDEKEKEAEKEEK-----PVENDKEDLLKEK-----549
; DB 23 SSQELCKGRCFESFERGECDCDAQCKYDKCCPDYESFCAEYKONKVRKTKKTPKP 82
; QY 550 --TDDT--SGRDNDEKAVASKGRKANSQGRKRIKTRSMANSEAEITP--QQSALA 605
; DB 83 PVDEAGSLDNGDFKVTTPDTSTQHNKUSTSPKIT--TAKINPRPSLPNSDTSKET 140
; QY 606 SMLNRSRWTEBEMETAKGLLEHGRNWSAIAARMVGSKTVSQCKNFYFNKQRNLDEI 665
; DB 141 SLTVNKETTETKETTITNNKQSTGDKETTSKAKETQSIKTSKADL-----APTSKV 193
; QY 666 LQHKLQNE---KERNARRKKKAPAAASEAEAPPVVEDEMEASGVSGNEEMVEAE 722
; DB 194 LAKPTPAETTTKGPALTTKPEPTPTTPKPEASTTP-----229
; QY 723 ALHAGSNEVRGECSPATVNNSSDTEIPSPHTEAAKDTGQNGPKPATILGADGPPGP 782
; DB 230 -----KETP-----PTTKSAPTTKPEAPTTKSAPTTPKPEAPTTT-----KEPAP 272
; QY 783 PTPPRTSRAPTEPTASEATGATPP--PAPSPSPAPPPVPKKEKEEETAAAPVVEG 840
; DB 273 TTPKPEAPTTTKEPAPT--TKSAPTTKPEAPTTKPKPATTPKE--PAPTTKPEPTTT 329
; QY 841 BEQKPPAAELAVDTGAEPVSKTEBEAGPKADAEABATAGALKAEKKEGGS 900
; DB 330 PKPEAPTTKPEAPTTTPKPEAPT-----APKPEAPTTTPKPEAPTTTPKPEAPTTTKE---379
; QY 901 GRATTAKSSGAQSDSSATCSADEVDEAEGGDKNRLSPRSLTTPGPRANASPKP 960
; DB 380 -PSGTTKPEAPTTTKEPAPT-----ATTTKSAPTTPKPE 418
; QY 961 LDLKQLKQRAAAIPPIQVTKVHEP-----PREDP--APTKEPAPPPPPONLPQESDAPQ 1014
;
; Db 419 -----SPTTTKEPAPTTTPKPEAPTTTPKPAPTTPKPEAPTTTPKPEAPTT 462
; QY 1015 PGSSPRGKSRSPAPPADKEAFAAEAKLPGDPP---CWTGSLPFPVPPREVIKASHPAP 1070
; DB 463 TKKPAATAPEKAPAPTTTPKETPTPKLPTTPEKLAAPTTPKAPATTPPELAPTTPEEP 522
; QY 1071 DPSAFSYPGPHPLPLGLHDTARPLPRPTISNP--PPLISSAKHPSVLERQIGAISQGM 1129
; DB 523 TPTT-----PEEPAPT--TPKAAAPNTPKBPATTPKPEAPTTTPKPEA-----563
; QY 1130 SVQLHVPISEHAKAP-----VGPVTWGLPLPMDPKKLAPSPGVKQQLSPRGOAGPESL 1184
; DB 564 -----PTTPKETAPTTTPKGTAPTTLKEPAPTTTPKAPAP-----KELAPTTTKEPTSTT 611
; QY 1185 G---VPTAQEASVLRGTLGSLVPGSGSITKGIPTSRVPSDAITYRGSITHTGTADVLVYKG 1241
; DB 612 SDKPAPTTP-----KGTA-----PTT--PKPEAPT-----TPKPEAPTTPKG 646
; QY 1242 TITRIIGEDSPSLDRGREDSLPKGHVIVYEGKKHVLSEYEGGMSVTQCSKEDGRSSGGPP 1301
; DB 647 TAPTTLKEPAPTTTPKPAKELAP-----TTTKGPTSTT-----SDKPAPTTP 689
; QY 1302 HETA--APKRTYDMMEGRVGRRAISSASIEGLMGRAPPP-----ERHSPHLKEQHHRGSIT 1356
; DB 690 KETAPTTTPKPEAPTTTPKPAPTTPETP-----PPTTSEVSTTPTTKEPTTIHKSPD 740
; QY 1357 OGIPRSYVBAQEDYLREAKLLKREGTP-----PPPPPSRDLTEAVKQALGPLKLPAPAH 1411
; DB 741 ESTPE-----LSAETPKALENSPKPEGVPTTKT-----PAATKPE--776
; QY 1412 EGLVATVKEAGRSIHEIPREELRHTPE--LPLAPRPLKESIT-----1452
; DB 777 --WTTTAKD-----KTERDLRTTPTTTTAAAPKWKETATTTTEKTESKITATTTQVTS 828
; QY 1453 ----QGTPLKYDTGAS-----TTGSKKHVDVRSGLIGSPGRTPPVHPPLDMDADARLER 1501
; DB 829 TTTQDTPPTTKITTLKTTLAPKVTTTKTITTTTEIMNKPEET-----AKPKDR 876
; QY 1502 ACVEBSLKSRPGTASSSGGS--IARGAPVIVPELGKPROSPLTYEDHGAPFAGHLPGRSPV 1560
; DB 877 ATNSKATTPKQKPTKAPKPTSTKPKTMRVRKPKTTP-----TPRKWTS 923
; QY 1561 TMRE--PTPRLOBSLSSS---KASQDRKLT-----STPREIAKSPHSTVP 1601
; DB 924 TMEPLNPTSRIAEAMLQTTTRPNQTPNSKLVEVNPKSEADAGGAEGETPHMLLR--PHVFWP 982
; QY 1602 EHHPH-----PISPYEHLRLGVSGVDLYRSHIPLAFDPTSTIPRGIPLD 1644
; DB 983 EVTPDMDYLPRVPRNOGIIN-----PMSDETNICNGKPDV 1018
;
; RESULT 49
; US-10-084-846A-7
; Sequence 7, Application US/10084846A
; Publication No. US2004006026A1
; GENERAL INFORMATION:
; APPLICANT: WEITNAUER, GABRIELE
; APPLICANT: MUHLENWEG, AGNES
; APPLICANT: TREFFER, AXEL
; APPLICANT: BECHTHOLD, ANDREAS
; TITLE OF INVENTION: AVILAMYCIN DERIVATIVES
; FILE REFERENCE: 1974-005
; CURRENT APPLICATION NUMBER: US/10/084,846A
; PRIOR FILING DATE: 2003-02-25
; PRIOR APPLICATION NUMBER: PCT/EP01/09815
; PRIOR FILING DATE: 2001-08-24
; PRIOR APPLICATION NUMBER: DE 101 09 166.4
; PRIOR FILING DATE: 2001-02-25
; NUMBER OF SEQ ID NOS: 120
; SOFTWARE: Patentin Ver. 3.2
; SEQ ID NO 7
; LENGTH: 19652

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; TYPE: PRT
; ORGANISM: Streptomyces viridochromogenes
; FEATURE:
; OTHER INFORMATION: Protein 2: amino acid sequence encoded by coding strand 2.
; OTHER INFORMATION: Start codon: gat, Start position: nucleotide 2.
US-10-084-846A-7

Query Match      3.1%; Score 409; DB 15; Length 19652;
Best Local Similarity 22.0%; Pred. No. 4.3e-09;
Matches 468; Conservative 165; Mismatches 808; Indels 690; Gaps 115;

708  SGVSGNEEEMVEE-----AEALH-----ASGNEVPRGEGSGPATVNNSSDTSIPS 753
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1660  AAVTGHDSAGVEEPARPSGRGMSTALEWFKSYSGSE--GGQC-----VEALC 1706
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
754  PHT-----EAKDTGQNGPK-----PPATLGADGPPPGPPT-----PPR 787
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1707  PHTIHIRDSKNTPEDEGPTLQVSTAWRAFTSATTEARRPELTPTTVFVPPPGCGRGP 1766
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
788  RTSRAPIETPTASEATGAPTPPPAPSPSAPPVVPVKEEKEETAAP--PVEEGEQKP 845
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1767  RCRRPVV--TRRPGCGRKRRTGTCSPASAGVRPPLPCRAGARGPSGPGCGHGRP 1825
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
846  PAAEELAVDTGKAEEPVKSECTBEAEEGPAKGDAAEAATAEALKAKEKGGSGRAT- 904
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1826  PGVRRSAAARRGSPRRRPAC-----GPLRLPSARAVRRDRARRRRRAAVGGRAAR 1879
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
905  ---TAKSSGAPQSDSATSACDEVAEGGDKNRLSPSPSLTTGTGDPANASQKPL 961
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1880  CPRSARTHARPA---VPAPCAAPSAPSAPVCPVRRRSPGPA--CPAWLFPFPFPGPAHL 1934
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
962  DLKQLK---ORAAAIPIQVTKVHEPPREDAAATPKAPAPPAPPQNQLQESDAPQPGS- 1017
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1935  WLAPLTPAPAGLLPPL-----ARPRAPRV-----LPVRPGTR 1970
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1018  -SPRGSRSAPPADKAEFAAEAAQKLFQ--DPCWTSGLPFPFPPPREVIKASHPADPSA 1074
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1971  RTPRSARSRRPPQRSRAAGAPSKTAPDARTPPCASPSCK-----RARPRGRPPR 2021
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1075  FSVAPP-----GHPLPLGLHDTAPVL-----PRPTISNPPPLISSAKHPSV 1117
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
2022  PCWAPTRPCAGAVGRPGAGCADRPVRPCCGTPWSPRRRARWPPPARAGGSAPG- 2080
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1118  LERQIGAISOGMSVQLHVPYSEHAKAPGVVTMGLPLPMDPKKLAPFGVGKQBQL----S 1173
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
2081  -----CGTFRGSPWARSCTARGSAP-----PTRRRPWSGGSGDSRSRGP 2123
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1174  PRGOAGP--PESLGVPTAQ-----EASVLRGTLGSGVPGGSITK 1210
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
2124  PRACPPRRPRAPGSPAARRRPPRRRPPAPSSRRTRPAGRGAAVSRAAAHCAASRPGSSA 2183
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1211  GIPSTRVPSDAITYRGSITHGTTPADVLYKGTITRIIGEDSPSELDRGREDLSLPKHVIY 1270
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
2184  RHPD-RPPSGSAPRLRGARVRWP-----GSSCR-----APSR-----RGSSGAG- 2223
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1271  EGKGHVLVSVEGQMSVT---QCSKEDGRSSSGPPHETAAPKRYDMWEG---RVGRAIS 1323
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
2224  RGRSG--CRPPGSAVRPGACRRAPG-SPARP RPAGTTPRPRGRGPRARRACRSTR 2280
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1324  SASIEGLMGRAIPPERHSPHLKEQHHRGSIITQIPRSYVEAQEDYLREAKLLKREGT 1383
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
2281  RSAARSRPGR--PP--RSP-----GGAAGRPRPGRAAAVHRRGRPARSVR--GS 2323
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1384  PPPPP--PSRDLTEAKYTOALGPLKLKPAHEGLVATVKEAGRSIHEIPREELRHTPELP 1440
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
2324  PPPPPAPVVRPAPRTACAGLPPAPRPA-----AGRASASAPRPPR--PGVP 2371
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1441  LAPRLKEGSIITQCTPLKYDTGASTGSKKHDSRLIGSPGRTFPVPHLDVNMADARALE 1500
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
2372  RGPPP-----PAR-----AARRPV-----WSGARACP-----RCVVR 2399
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1501  RACYESLSK-----RPGTASSGSGSIARGAPVIVPELGPK---RQSPLTYVE 1544
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
12400  RCCPVQRRSAGRRPPSGRRSAAAPRGAGAGTS--RRRAP-----GRPSGTRPSP- 2448
1545  DHGAPPAGHLPRGSPVTMREPTPRLOEGLSSSKASQDRKLTSTPREIAKSPHSTVPEHH 1604
2449  ---PPPGAACPRGP--TAGPPGPPPARAGVAHG-----SVPGPPVYR--PRRRVRDRR 2493
1605  PHPISEVHLLRGVSGVDLYRSHIPLADPTSIPIGIPLDAAAAVYVPLPHLAPNPTYPHL 1664
2494  PPAPPREARAGPP-----PPAHSAPRRP-----PSHRVPASCHP-- 2530
1665  YPPYLIRGY---PDTAALLENQTIINDYITSOOMHNTATAMAQR--ADMLRGLSPRES 1718
2531  -GGGRIDGWCAGCPATLTIGRRANTCPLVYSGK---GALGOADRKLKAEIKLNGEVR 2584
1719  ---SLALNYAAGP-----RGIDLSQVPHLPVLVPTPTGTPA----- 1752
2585  WPAPAVPDTRRSRAASPTTGPGRACDRDGPGRGARS-----VPSRPVPVAMWRCR 2634
1753  TAMDLRLAYLP-----TAPQPTS-----SRHSSSPLSPGPGTHLTKPTTTSSSERER 1798
2635  ALLPRRSALPPWKRGGADSAPNLFCAAGGLSRRSPSPWS-----ASPTSCACAPRG 2687
1799  DRDRERDREREKSLTSTTTTVEHAPIWRPGT-----EQSGSGSGSG 1842
2688  DRARQ---PRRRP---TAAAGSRPPPPARPGSAPPPSPGRRAGSRRRRRRSRGSGSPG 2740
1843  GG-----CGSSSRPASHSHAHQSPISPRTOTDALQORSVLHNTGMKGI 1886
2741  TGRCPWPVRPVSRTARCGNPARRSAPCRSRPRPRAPT----- 2781
1887  ITAVPSKPTVLRSST-----STSSPVPRPAATPPATHCPGLGGLDGVVYTLMEPVL 1938
2782  ---GPPGTSFRCTPRSPWSQGSASASVREAPGRRAHLPRG---DQORP----- 2826
1939  PKEARVPRAPERPRADTGHAFIAPKPARSGLBPAS--SPSKGSEBPLVPPVSGHAT- 1993
2827  ---ADQPRGGDDPSGTRALAE--FVRPGVAPGGRQASAGAGVGRGVGGDGLRGTG 2879
1994  ---IARTPAKNLAPHA-----SPDPAPAPASADPHREKTSQKFPFIOELERSLGY 2043
2880  TGVVRSLSGRALRAARWALSNSRRPPGGAARQTGIQ-----GLGRPLRVL- 2930
2044  HGSSYSPEGEVPSVSPSLTHDKLPKH--LEELDKSHLEG-----ELRPQPGPV 2094
2931  -GDCLPAQRVGP-----QPGHRLVQADGGPAEEFAGGPGVDLPVVGRA 2975
2095  K-----LGEAAHL-----PHLRPLPESQSSSSPLLOTAPQVKGHQVRVLAQHI 2139
2976  RGGGKLPDLGGHAAHLDEQIDEPHRRHGLAASDGDQDPRNTGAGG--QQHRVRDVA-HV 3032
2140  SVIT-----QDVTRHPH--QOLSAPLPAPLYSPFGASCPLDLR--RP-----PSDLY 2184
3033  DVAVCAQLGQLHDDRHHVPGDLGEP-----PGHPAEQADRARGAPGHVGDPOHAR 3084
2185  LPPP-----DHGAPARGSPHSGGKRSPB---PNK-----TSVLGGEGEDGIPV- 2227
3085  LHDALRGGLQHLGARREFGLAVGRRPGRRGPRGRTGRGRAVLQHAH--VDDVGTARGP 3142
2228  PEGMTEPHGRSAV-----YPLLYRDG-----EQTEPSR 2256
3143  PORVQQAAGRHAVALHVPFGDPPVAADGVDRHVRADGVHDVHGVPFRRGGGVQDEEPAR 3202
2257  MGSKSPGNTSQPPAPFSLKTESNAVMSKQOEINKLNTNRNPEYNIQGTIFNM 2316
3203  Q-----GEVRYPP-----GDRHLGSGRQVRAQLTAH---BP-----RPTSHENAL 3241
2317  PAITGTLMTYRSQVQEHASTNMGLEAIRKALMGKYDQWBEESPPLSANAFNPLNASAS 2376
3242  ALIGHLLLLTSCRAAVPGAPDLPVVRHRC-----APTRRRRPGRSTRGCR 3292
2377  LPAAMPITAADGRSDHTLTSFGCGGKAKVSGRPSRKA--KSPAGLASGDRPSPSVSHS 2435
3293  RTGRRPAGRARAPRRRVPAEPWGGSGRA--AGRHGRRSGRSPTRCTRSRR- 3347
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Qy 1629 PLAPDPTSIPIRGIPLD 1644
Db 1044 PMLSDETNICNGKVD 1059

RESULT 52
US-10-205-331-66
; Sequence 66, Application US/10205331
; Publication No. US20040058326A1
; GENERAL INFORMATION:
; APPLICANT: Warner-Lambert Company
; APPLICANT: Lee, Kevin
; APPLICANT: Dixon, Alistair
; APPLICANT: Brookbank, Robert
; APPLICANT: Pinnock, Robert
; TITLE OF INVENTION: Identification and Use of Molecules Implicated in Pain
; FILE REFERENCE: WL-A-018199
; CURRENT APPLICATION NUMBER: US/10/205,331
; CURRENT FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: GB 0118354.0
; PRIOR FILING DATE: 2001-07-27
; NUMBER OF SEQ ID NOS: 117
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 66
; LENGTH: 2364
; TYPE: PRT
; ORGANISM: Rattus norvegicus
; FEATURE:
; OTHER INFORMATION: Microtubule associated protein IB
US-10-205-331-66

Query Match 3.1%; Score 406.5; DB 12; Length 2364;
Best Local Similarity 19.3%; Pred. No. 4.6e-10;
Matches 489; Conservative 326; Mismatches 95; Indels 729; Gaps 107;

Qy 68 LLEFQPGNRSQEL-----HLRPSHYLPEL-GKSEM----- 100
Db 79 LLSLTHPANKASLTFCPEEGDWKNSNLDNRHLQDFINIKLNSASILPEMGLSEFTEYL 138
Qy 101 -EFIESKRRLLELPD-----LLRP-----SPLLATGQ-----PAGED-- 134
Db 139 SESVEVPSP-FDILEPTSGGFLKSKPCCYIFPGGRGDGALFVNGFNMLNGSERKS 197
Qy 135 -----LTK-----DRSLTG-----KLEPVSPSPPHTD-----PE 159
Db 198 CFWKLTHLDRVDSILLTHIGDGNLPGINSMLQKIAELBEESQGSTNSDNWKNLISPD 257
Qy 160 LEL-----VPRLKBEELIQNMRVDREITWVQOISKLKKKQOOLEEEAAKPEP-----E 211
Db 258 LGVFLNVPENLKNPEPNIKMRSTEBACFTLOVLNKL SMKPEPLFRSVGNATEPVILFQ 317
Qy 212 K-----PVSPPTIESKHSLSVLIYDENRKKAAHRIILEGLGPVELPLYNQPSD 262
Db 318 KMGVGLKMYVLNVPKSSKEMQFMQOQWGTGNKDKAB-----LILPNGQEVDP----- 366
Qy 263 TRQVHENIKINQAMRKKLILFYRRNRHARKQWKQFCQYDQ--LMEALEKKYVERIENNP 320
Db 367 -----LSYLASVSLIWHIPANPAEKIIRVLFPNGSTQYNILEGLB-KLKLHDLFLK 416
Qy 321 RRRAKESKVREYKEQPEIRKQRELOERMQSRVQGRGSLMSAARSEHVESEIIDGLS 380
Db 417 QPLATQKDLTG--QVSTPPV-KQVKLQORADSRESLKPAATKSSKSVRKESEAPAT 473
Qy 381 EQENLEKQMLQAVIPMLYDADQORIKFINMGLMADPMKYKDR--QVMNWSQOEKE 438
Db 474 KASQVEK-----TPKVESKEKVIK-----KDRPKVESKPSVTEKE 510
Qy 439 TPREKFMQHPKNGFLIASFLERKTVASCVLYLYLTKKKNYKSLVRRSYRRRGKSOQOQ 498
Db 511 V-PSKEQSP-----VKAEEVAEKAAT-----SKPKVTYDKVVKKEIKTKPEEKKEK 557
Qy 499 QOQOQOQOQOQPMRPSSEBDEKEKEKEEKEEKEPEVENDKEDLLKEKTDGSDN 558

Db 558 PKKEVAKKEDKTL-----KKDEKPKKEBAKEIKKEIKKEKKEKKEVKETPLKD- 610
Qy 559 DEKEAVASKGRKTANSQGRKGRITRSMANEANSEEAITPQOASAEASLMELNBSRWTEE 618
Db 611 -----AKKEVKDEKKEVKKEEK-EPKKEIKKLSKIDKIKSTPLSDT 650
Qy 619 EMETAKKGLLEHGRNWSAIARMVSGKTVSQCKNFYFNYKKRQNLDEILOQHLKMEKERN 678
Db 651 KKPAAALK-----PKVAK-----KEPTKKEPIAAGKLDKKGKVK 684
Qy 679 ARKKKKKAPAAASEEAAPFPVVEDEWEASCV--SGNEHEMVEEAALHAGHVEVPREGC 736
Db 685 VIKKEGKTTAAATAVGTAAV-----AAAGVAASGPAKEL-----EAERSLM 727
Qy 737 SGPATVNNSSDTSIPSPHTEAAKTGQNGPKPATLGADGPPGPPPTPRRTSRPIEP 796
Db 728 SSPEDL--TKDFEELKAEIDVAKI-----KQLELIED-----EELKE 766
Qy 797 TPASEATGAPTPPPAPPSPSPAPPVVPVVPKKEEBETAAPPE-----EGBEQKPPAAEEL 851
Db 767 TEPGEAY-----VIQKETEVSKGSAESPDEGITTTEGSGECEQTPEEL 809
Qy 852 AVDTGKAEPVKSECTEEAB-----EGPAKGDAAA--EATAEGALKAEKKEGSGRATT 905
Db 810 -----EPVEKQGVDDIEKFEDEGAGFESEAGDYEEKAETEEAEBEEDGEDNVSG 861
Qy 906 AKSGGAPQDSSSATCSADREVAEGDKNRLLSPRSLTPTGDRANASPOKPLDLKQ 965
Db 862 SAKSHSPTDEEIIAKAADV-----HIKKEKRESV--ASGDDRAEDMDALEKGE 909
Qy 966 LKQRAAAIPIQVTKVHEPPREDAATK-----PAPPAPPPPQLOPESDAPQ 1013
Db 910 AEQ-SEEEGEBEEDKAEDAREEDHEPDKTEAEDYVMAVDKAAEAGVTEQDYDFLGPAK 968
Qy 1014 QPG-SPPRGKRSRPAAP-----ADKEAFABEAQKLPDPPCWTSGLPFPVPPPREVI 1063
Db 969 QPGVQSP--SREPASSIHDETLPGGSESEATASDEENREDQPEEFATSGYTQSTIEI- 1024
Qy 1064 KASPHAPDSAFSAFVAPPGHPLPLGLHDTARPVLV---RPPTISNPPPLISSAKHPVLE 1119
Db 1025 -----SSEPTPMDEMSTPRDVMTDETNNEETESPSQEFVNIKYESSL- 1067
Qy 1120 ROIGAISQGMVQLHVPYSEHAKAPVPMGLPLPMDPKLAPFGSKQEQLSPRG--Q 1177
Db 1068 -----YSQEVSKPVVASFNGLSGSKTDATDGRDYNASASTISPPSSMEEDKFSKALRD 1122
Qy 1178 AGPPESLGVPYTAQEAHV-----LRGTALGSVPGGSIK-----GIPSTRVPSDS 1221
Db 1123 AYRPEETDVKTGAELDIKQVSDERLSPAKSPSPSPSPSPSPSPSPSPSPSPSPSPSP 1182
Qy 1222 AITYRGSITHGTADVLTKTITRIIGEDSPSLDRGREDSPKGHVIVYEGKKGHVLSYE 1281
Db 1183 KASAEGRAT-----AVVSGVTOAVVEEHCAPEEKTLEVVVSPSQSV--TGSAGHTPYQ 1235
Qy 1282 GCMSTVQCKSGEDRSSSGPPHET-----AAPKRTYDMMEGRVGRASIASAS-----IEG 1329
Db 1236 -----SPTDEKSSHLPTVETENAQAVPV-SFEFEAKDENERSISIPMDRVPVPS 1286
Qy 1330 LMGRAIPPERHSPHLKQHHIRGSITQGIPLRSYVBAQEDYLRRREAKLLKREGTTP- 1385
Db 1287 PIEKVLSPRLSP-----LIGS-----ESAYEDFLSADDKALGRSSESPGEGK 1329
Qy 1386 -----PPPSDELIT-EAYKTQALGPLKLPKPAHGLVATVKEAGRSIHEIPREELRHT 1436
Db 1330 NGKQGSDEKESPVSDITSDLYQ-----KQESKRAGFIPDKEDFSPEKKASDAEINSSQ 1383
Qy 1437 PELPLAPRPL-KEGSITQGTPLKDYDTGASTGSKKHIDVRLISGSPGRTFPFVHPVLDVAD 1495
Db 1384 SALALDERKLGGDSPTQ-----VDVQFGFGFKEDTKMSISEGTVSDKSAFVDEGA- 1435
Qy 1496 ARALERACVEESLKSRPGTASSGGSIARGAPVIVPELKGKPROSPLITYEDHGAFFAGHP 1555

Db 753 QTVQYLSQTSSTSEATTA-----QPVSQQAQVQLPQVSAGKQLPVSPVPTIQGEPOI 807
QY 845 PPAABE--LAVDTGKAEPVKSECTEABEAPKAGKDAEAAEATAEGALKAEKKEGSGR 902
Db 808 PVATQSVVPVHSGAHFLPV-----GQPL 831
QY 903 ATTAKSGAPQDSSSATCSADEVDEABEGDKNRLLSPPBSLLTPTGCDPRANASPOKPLD 962
Db 832 PTPL-----LPQYVPSQIPSTPHVSTAQTG-----FSSLPTWA-----AGITQPLL 874
QY 963 LKQLKORAAAIP-----PIQVTKVHEPPREDAAPTKPAPPAPPPONLQAPESDAPQPG 1016
Db 875 TLASSATTAIPGVSTVPSQLPTILQPVTO-----LPSQVHQLLOP-----AVQSMG 923
QY 1017 SSPRGKSRPAPPADKAEFAAEAAQKLPDPCWTSGLPFPVPPREVIKASPHAPDPSAFS 1076
Db 924 I-----PANL-GQAAEVLSSGD--VLYQGFPPRLPQY-----PGDSN 959
QY 1077 YAPPGHPLPLGLHDTPVPL--PRPTISNPPPLISSAKHPSV--LEROIGAISQMSV 1131
Db 960 IAPSSNVASVCIHST--VLSPPMTEVLATPGYFPTVQPYVESNLLVPMGV--GGQV 1014
QY 1132 QLVHPYSEHAKAPVPGVTMGLPLPMDPKLAPFSGVKQEQLSPRGOAGRPESLGV-----1186
Db 1015 QVSQPGSLAQAPTSSQAV-----LESTQGV-----SQVAPAEPVAVAQPOA 1058
QY 1187 --PTAOEASVLRGTALSGVPGSGITKIGIPSTRVPSDSAITYRGSITHGTADVLYKGTIT 1244
Db 1059 TQPTTLASSV--DSAHSDVASG-MSDG--NENVPSSG-----RHEGRIT 1098
QY 1245 RIIGEDSPSLDRGREDSPKGVHIVYEGKGVHLSYEGGMSVTQCSKE-----1292
Db 1099 KRHYKSVRSRSHKTSRKLRLNVSNKGD-----RVVEQCQLETHNRKMTFKFD 1150
QY 1293 -DCRSSGPPHETAAKRTYDMMEGRVGRATISSASIEGLMGRALPPEHSPHLLKQHHI 1351
Db 1151 LDGN-----PEETATIMVNDPI-----LAIERESFVDQREII-----EKADEMLSEDSV 1198
QY 1352 RGSITQIPRSYVVEAOEDYLREAKLLKREGTPPPPPPSRDLEAVKTOALGLPKLKPAAH 1411
Db 1199 EPEGDQGL--ESLQKDDYFGSGKLEGEFKQIPASSM-----PQIGIPT 1244
QY 1412 EGLVATVKEAGRS--THEIPREBLRHTPELPLAPRLKESITQGTPLKYDTGASTGSK 1469
Db 1245 SSLQVQVHSAGRRFVSPVESRLRESKVFP-----SEIT-----DTVAASTAQS 1289
QY 1470 -----KHDVPSL-----IGSPRTFPPVHPLDVMADARALE 1500
Db 1290 PGNNLSHASSLSLQQAFAFSELRRRAQTEGNTAPPNFSHTGPTFPVVPV-----1338
QY 1501 RACYEELKSRPGTASSGSGSIARGAP-----VIVPELCKPRQSP--TYEDHGAPPA 1551
Db 1339 ---FLSAGVPTTAATAVPATSPNDISITVQSEVTVTEGIAGVATSTGVTS 1395
QY 1552 GHLPGRSPVMTREPTRLRQSGSLSSKASQDRKLTSTPREIA--KSPHSTVPEHPHPHI 1608
Db 1396 GGL-----PIPVSESPVLSVWS--ITIPAVVSISTTSPSLQVPTSTSEIV 1441
QY 1609 SPIEHLRLGVGDVLYRSHIPLAFDPTSIPRGIPLDAAAYLYRHLAPNPTPHLYPPY 1668
Db 1442 -----VSSTALYPS-----VTVSATSASAGGSTATPGFK-----PPA 1473
QY 1669 LI-----RGYPTAALENRQ-----TIINDVITSOOMH 1696
Db 1474 VVSQQAAGSTTVGATLTSVSTTSTSPSTASQLISQSSSTSTTLAETVVVVSASHSLDKTS 1533
QY 1697 HNTATAMA-----QRADMLRGLSPR-----ESSIALNYAAGPRGIID 1733
Db 1534 HSSTTGLAFSLASAPSSSSPGAGVSSYISQGGHPLVIPSIVASTPILPQAAAGTSTPL 1593
QY 1734 LSOVPHLPVLVPTPGTATAMDRLAYLPTAPOPFSSRHSPLSGGP--THUTKPTTTS 1792
Db 1594 LPQVPSIPPLVQPVANVPV--QOTLIHSQOP-----ALLPNQPHTHCP-----1636

QY 1793 SSERERDRDRDRDRERKSLTSTTTTVEHAPIWRPGTEQSSGSGSGSGSSSRPA 1852
Db 1637 -----EVDSDTPKAPGIDDIKTLEE-----KLRSFSEHSSGA-----1671
QY 1853 SHSHAHQHSPISPRTQDALQQRPSVLHNTCMKGI-ITAVEPSKPTVLRSSTSTSPVRPAA 1911
Db 1672 -----OHASVSLSTS-----LVISTVTPGTPTTAVAPSK--LITSTT-----S 1708
QY 1912 TFPPTHCHPLGTLGDLGVYPTLMEPVLLPKAEAPVARPERPRADTGHAFKAPPARSGLEP 1971
Db 1709 TCLPPTNLPLG-----TVALPVTVPVTPGQVSTPVSITTSVTKVP 1747
QY 1972 ASSPSKSGRPLVPVPSGHATARTAPKANLAPHASPOPPAPASDPRHREKTSQ--KP 2030
Db 1748 GTAPSPPPLTKAPVLPVGTLPAGTLPSEQ-----PPFPGPSL-----TOSQOP 1792
QY 2031 FSIQELHLSLGVHSGSYSGVEPVSPVSSPSLTHDKGLPKHLEELDKSHLSEGLRPKQ 2090
Db 1793 LEDLDAQLR-----RTLSPMITVTSAV-----1815
QY 2091 PGVKLGGGAHLPLRLPLPE---SQSSSPLLQATAPV---KGHVVVTLAQHISEVI 2143
Db 1816 -GPVSNAAPTA-ITEAGTQPKGVSVQKGPVLATSGAGVFKMGRFQVSVAA-----1866
QY 2144 TDYTRHHFPQQLSAPLAPLYSPFGASCVPYDLRLRRPPSDLYLPPP-----DHGAP 2193
Db 1867 --DGAQKEGKNKSEDAKSVHFESSTSESSVLSSSPESTLVKPEPNGITIPGISSDVPS 1924
QY 2194 ARGSPHSEGGKSPENKTS-----VLGGEDGIE-----PVSPPEGMTE 2233
Db 1925 AHKTASEAKSDTQPTKVGRFOVTTTANKVGRFVSFKTEDKITDTKKEGFVASPPFMDL 1984
QY 2234 PGHSRAVYPLLVRDCEOTEPSRMGSKSPGNTSOP--PAPFSKLTESNAMVSKKQIBNK 2292
Db 1985 EQAVLPVAVIPKKEKP--ELSEPSHLN---GPSSDPEAAFLSRVDVDCSGSPHSPHQLSSK 2039
QY 2293 KLNTHNRNPEYNIQPGTEIFNMPAITGTGLMYRSQAVQ-----EHASTNMGLEA 2344
Db 2040 SL-----PSQNLSQLSGLSNFSSYMSDNEIDEDLKLRLRLDRKHLKEIQDLQS 2092
QY 2345 IIRKALMGKYDQWEESPPLSANAFNPLNASASLPAAMPITAADGRSDHTLTSFGGGGKAK 2404
Db 2093 RQKHETESLYTKLGKYP-----AVIIPPAAPLS---GRRRRPTKS-----KGS 2133
QY 2405 VSGRPSRRKAKSP-APGLASGRPPSV---SSVHSEGD 2438
Db 2134 KSRSSSLGNKSPQLSGLSNLGGQAAVLLHPQOTLHPGN 2172

RESULT 54

US-10-336-472-230
; Sequence 230, Application US/10336472
; Publication No. US20040043929A1

GENERAL INFORMATION:

; APPLICANT: Anderson, David W.
; APPLICANT: Ballinger, Robert A.
; APPLICANT: Baumgartner, Jason C.
; APPLICANT: Burgess, Catherine E.
; APPLICANT: Casman, John S.
; APPLICANT: Chant, John S.
; APPLICANT: Berghs, Constance
; APPLICANT: Gangolli, Beha A.
; APPLICANT: Edinger, Shlomit R.
; APPLICANT: Ellerman, Karen
; APPLICANT: Furtak, Katarzyna
; APPLICANT: Gerlach, Valerie
; APPLICANT: Gilbert, Jennifer A.
; APPLICANT: Gunther, Erik
; APPLICANT: Gorman, Linda
; APPLICANT: Guo, Xiaojia Sasha
; APPLICANT: Ji, Weizhen
; APPLICANT: Li, Li

US-10-052-648A-40

Query Match	3.1%	Score 405;	DB 15;	Length 2382;
Best Local Similarity	19.6%;	Pred. No. 5.4e-10;		
Matches 513;	Conservative 291;	Mismatches 943;	Indels 872;	Gaps 114;
QY	147	PVPPSPPHDTP	PELELVPPLRSKEELIQNDMDRVDREITWVEQOIQISLKIKKQOQLEBEAAK	206
DB	99	PLSLPQDSIPA	AVPQSPAPPHRETV-----TATATSVAAQPPAAAAAPGEQVA	149
QY	207	PPBP-----	---EKPVSPPIESKHRSLVQIIYDENRKKAEAAHRILEGQPQVELPLY	257
DB	150	GPAPSTVPS	STSKDRPVSPQSL-----VGSKEEPPPA	181
QY	258	NQSDTROHYENIK	INQAMRKLLIFYKRRNHAKQWKQFCQRYDOLMEALEKVKVERIE	317
DB	182	RSGSG-----	---GSAKEPQBERSQQDDI-SELTEKAVGMS	215
QY	318	NNPERRAKESKV-	REYYEKOPPEIRKQ-----ELQERMQRVQSGRGLSMAARSE	369
DB	216	NDGRFLKFD	IEIGRGSFKTVYKGLDTETTVAVANCELODRK-----LTKSERQRF	265
QY	370	HEVSEIIDGLS	QENLEKQMRQLAVTPMIMYADDAQRIK-----FINNGLM-ADPMKVYK	424
DB	266	KEBAEMLKGL-	QHPNIVR-----FYDSWESTVGKCKIVLTVELTMTSGTLTKYL	313
QY	425	DR-----	---QVMNMWSEOEKETFREKFMQHPK-----NFGLIA	455
DB	314	KRFKWKIKVL	RSWCQILKGLQFLHTRTPPIIHRDLKCDNIPIGTGTSVKIGDLGL--	371
QY	456	SFLERKTV	AEVCL-----YYLTKKNENY-----KSLVRSYRRRRGKSOQQOQQQ	501
DB	372	ATLKRA	SFAKSVIGTPEFMAPEVVEKYDSSVDVYAFGCMQMLEMATSEYPVSECAQAQI	431
QY	502	QOQOQOQOQP	-----MPRSSQ-----EEKDEKEKEAEKEEKEPVENDKEDLLK	547
DB	432	YRRVTGSK	PASFDKVAIPKEIIEGCIQRQNKDERYSIKDLNLHAPFBQSETGVRVELAE	491
QY	548	EKTDDTSG	EDNDEKEAVASGKRKTANSQGRKGRITRSMANEANSE-EALTPQOSABELAS	606
DB	492	E-----	---DGEKTAIKLWLRIEDIKKLKGKYKDNEAIEPFDLERDVPEDVAQ---	538
QY	607	MELNESR	WTEEMETAKGLLBHGRNWSAIAIRWVGSKTVSQCKNFYFNKYKQNLDEIL	666
DB	539	-EMVSEYV	CEGDHKTAKAIAKOR-----VSLIK-----RKREQRLVR	576
QY	667	QOHLKMK	EKERNARRKKKA-----PAAASEEAPPPVVEDEMEASG	709
DB	577	EEQKKQ	EBESSLKQOVEQASASQGTGIKQLPSASTGIPTASTTSASVSTQVPEEPPA--	634
QY	710	VSGNEEMV	EEAEALHASGNVEPRGECSPATVN--NSSDTESIPSPHTEAAKDTGQNGP	767
DB	635	-DQHQQYQ	OQPSISVLSDGTGVDSGQGSVFTESRVSSQQTVSYSQSH-EQAHSTGTGVP	692
QY	768	KPATLGAD	GPPG--PPT-----PPR	787
DB	693	HISTVQAQ	SQPHGVYPPSVVAAQSQSQSPSSSLTGVSSSQPIQHPPQOQOQIQATTAPPQ	752
QY	788	RTSRAPT	TEPT-PASEATGAPTPPPAPSPAPPPVPVPEKEEBETAAPVVE--EGREQ	844
DB	753	QTVQYS	LSQTSSTSEANTA-----QPVSQQAQVLPQVSGAKQLPVSPVPTIQEPOI	807
QY	845	PPAAE--	-LAVDTGKABEPPVKSECTEBAEGPAGKDAEAAETAEGALKAEEKGSGSR	902
DB	808	PVATQPSV	VPVHSGAHPLV-----CQPL	831
QY	903	ATTAKSGA	PDQSDSSATCSADEVDEAGDGNRLLSRPSLLTPTGDPANASPOKPLD	962
DB	832	PTPL-----	-LQYVPSQIPITPHVSTHATG-----FSSLPTWA-----ACITQPLL	874
QY	963	LKQLKORA	AIIP-----PIQVTKVHEPPREDAAPTAPPPPPQNLPQESDAPQPG	1016
DB	875	TLASSATTA	IPGVSTVPSQPLTLLQPVTO-----LPQVHPPOLLOP-----AVQSMG	923

Qy	1333	RA1PP----	ERHSPHLKEQHIRGSI	TOG1PRSVVEAQEDYLR	BREAKLKR	ETP-----	1384
Db	733	---PPTSEVSTTTT	KEPTTIHKSPDESTPE	-----	LSAETPKALEN	773	
Qy	1385	PPPPSRDLTEAYK	TOALGPLKLP	PAHEGLVATVKEAGRS	IH1PEIRLHR	TPLE-LPLAP	1443
Db	774	SPKEPGVPTTKT	-----	PAATKPE--	MTTAKD--	KITERDLRTTETTTAA	817
Qy	1444	RLPKESGIT	-----	QGTPLKYD	TGAS-----	TTGSKKH	1474
Db	818	KMTKETATTTTEK	TESKITATTTQV	STTTQDTPPKIT	TTTLKTTLAPK	VTTTKKTTTT	877
Qy	1475	SLTGSPPRTFP	VHPLDMDARALER	ACVYESLKRPGT	ASSGGS-IARGAP	VIIVPEL	1533
Db	878	EIMNKPEET	-----	AKPKDRATNSKAT	TPKPKPTLYAKPKPT	STKKPKTMPRV	925
Qy	1534	GKPROSLTYED	HGAPFAGHLPRGS	PVTME--	PTPELQSGIS	SSSKASQDRKL	1591
Db	926	RKPKTTP	-----	TPRKMTSTMELN	PTSR1AEAMLQ	-----	963
Qy	1592	IAKSPHSTVPE	HHPHFIPSPYEH	LRLRGSGVD---	LYRSH1FLAP	DPDPTSPRG1PLD	1648
Db	964	---TPNSKLVE---	VNPKSEDAGAE	GETPHMLLRPHV---	FMPEVTE---	DMD----	1005
Qy	1649	Y1LPRHLAPN	1658				
Db	1006	-YLPR--	VPN	1012			

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RESULT 58
US-10-216-705-21
; Sequence 21, Application US/10216705
; Publication No. US20030096973A1
; GENERAL INFORMATION:
; APPLICANT: Meristem Therapeutics, S.A.
; TITLE OF INVENTION: Recombinant Collagens and Derived Proteins Produced by Plants, Me
; TITLE OF INVENTION: obtaining Such and Their Uses
; FILE REFERENCE: 1149-3 DIV
; CURRENT APPLICATION NUMBER: US/10/216,705
; CURRENT FILING DATE: 2002-08-09
; PRIOR APPLICATION NUMBER: US 09/331,347
; PRIOR FILING DATE: 1999-08-17
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 21
; LENGTH: 1464
; TYPE: prt
; ORGANISM: Homo sapiens
US-10-216-705-21

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Qy	974	PPTQVTKVHPREDAAPTKPA--PPAPPPPNQLPESDAPQQGSS--PRGKSRSFAPP--	1029
Db	323	GNDGATCAAGPP---GPTGFAGPPGPGAVGAKGEA-GFQGRSGEGPGVGRGEGPPG	377
Qy	1030	-----ADKEAFAAEAQKLPDPCWTSGLP-FPVPPREVIKASPHAPDPSAFS	1076
Db	378	PAGAAGPAGNPGADGGQGAKGANGAPG-----TAGAPFGAGRGSGPGQPGPGPKGN	432
Qy	1077	YAPFGHPLPLGLHDTARPVLPRPPTISNPPPLISSAKHPSVLBRQICAIISQGNMSVLHVP	1136
Db	433	SGEPGAPGSKG--DTGAKGEFGVVGQGP-----GPAGEGKRG-----	470
Qy	1137	YSHAKAPGVPTWGLPLPMDPKKLAPFSGVKQESLSPRQAGPPSLSGVPTTQAEASVLR	1196
Db	471	-----ARGEPT--GLP-----GPPGERGGPSRGFPFGADGVAGPK	505
Qy	1197	GTA--LGSVPGGSITWKIP--STRVPSDSALTIRGSI THGTPADVLKGTITRIIGEDSPS	1253
Db	506	GPAGERGS-PGPAPGKSGPGEAGRGEGALFGAKAGLUT-GSPGSGPDGK-----TGPPGPA	559
Qy	1254	RLD-----RGREDSL-----PKGHVIEGKKGHVLSYEGGM-----SVTQCKSED	1293
Db	560	QDGRPGPPPPGARGGAGVMGPPFGKGAAGEFGKAG-----ERGVPPGPGAVGPAGKOG	614
Qy	1294	GRSSGPPHETAAPKRTYDMMEGRVGRAISSASIEGLMGRAI PP-ERHSPHILKEQHHR	1352
Db	615	EAGAQQPP- GPAGPAGE-----RGEQGA- GSPGFQGLPGPAGPPEAGKPGE-----	660
Qy	1353	GSITQIGIPRSYBAQEDYLREAKLKLKREGTPPPPPPSRDLTAYKTQALGPILKLK--PA	1410
Db	661	-----QGVPGDLGAPGSGARGERFGPERGVQGPQGA-----GPRGANGAPG	704
Qy	1411	HEGLIVATVEAGRSIHEIPREELRHPTPELAPRPLKEGSIITGTP-----LKVDYTGASTT	1466
Db	705	NDGAKG--DAG-----APGAP-----GS--QCAPQLQMPGERGAGL	738
Qy	1467	GSKKHD-----VRLSLGSPGR-----TFP--FVHPDLVMADRALERACYEBSLSKSRPG	1513
Db	739	PGPKGRGDAGPKGADGSPGKDGVRGLTGFI GPPGAGAPGD-----KGESG	785
Qy	1514	TASSSGSITARGAPVIVPELKGPRQSPLTYEDHGAPAGHLPGRSPVTMREPTPRLOECS	1573
Db	786	PSGPAGPTGARGAPDRGEGP GP--GPAGFA--GPPCAD---GQPCAKEGPGDAGAKGD	837
Qy	1574	LSSSKASQDKLSTPREIAKSPHSTVPEHHHPH1---SPYEHLLRGVSGVDLYRSHIP	1629
Db	838	-----AGPPGAPGAPGPPGPIGNVGAAPKAGARGSAGP-----	870
Qy	1630	LAFDPTSI PRGILPDLAAAAYLPHRLAPNPTYPHLYPPVILIRGYDPTAALENRTIINDY	1689
Db	871	-----PGATGPPGAGRVGP-----PGPS--GNAGPP---GPPGPAKEGKGPRGE--	912
Qy	1690	ITSQMHNTATAMQADML-----RGLSPRESSLANVAAGPRGIIDLSQVP	1738
Db	913	-----TCPAGRPGVEVGGPPPGPAGEXKSGPCADGAPAGTPTGPGIAGORGVV	961
Qy	1739	HLPVLPPT--PGTPTAMDRLAYLTAQPTFSRHSSSPLSPGGPHTLTKPTTSSSR	1796
Db	962	GLPQGRGERFGPLPGPSG-----FCKQFSGASGERGPPGPMGPPGLAGPCEGSGRE--	1015
Qy	1797	ERDRDRDREREKSILTSTTTTVEHAP1WRPCTQSSGSSGSSGGG---GSSSRP	1851
Db	1016	-----GAFGAGSGPGRDGSFGNKGDRGETGAGPP	1045
Qy	1852	ASHSHAHQHSPISPRTQDALQORPSVLHNTGMKGIIITAVEPSKPTVLRSTSTSSVRPAA	1911
Db	1046	GAPGAPGAPGVPGP-----AGKSGDRGETGPAGP-----AGPVGPAG	1082
Qy	1912	TFPPATHCPUGTGLDGVYTIMPEVLLPKEAPRVARPERPADTGH-----	1957
Db	1083	ARGP-----AGPQGRGPKGETGEGQGRGIRKGHRG	1112

[illegible]

160	DB	EEPAATETATENNNTSEEAUAPEG-ATAD-----IAAETTKEBSTDKAPPEA	207
606	QY	SMELNESSRWTEBEMETAKKGLL--BHRNWSAIARMVSGKTSQCKNFYFNKKRQLND	663
208	DB	AAESP-----VEDQDEATKALAAEEGGTKTPAADAEDAADAAE-----PAPEASSTD	256
664	QY	EILQOHLKM-----EKERNARKKKKAPAAAS--EEAAPPVVVEDEEMGASGVSGNEEE	716
257	DB	EVAQPEATPAEAPTEBKKEDAPOEPPEQLTEVWVEESASPEVABEPASAEQPPPADEP	316
717	QY	MVEEAAALHASGNEVPRGCSGPATVNNSSDTEISPSPHTEAAKDTQNGPKPATLGD	776
317	DB	APSEPPAAESAPAVEVESEPAF--ODETFVQKAPAAEQSTAEADVTPPEPAVVEASAK	373
777	QY	GPPEGPTTPRRTS---RAPIEPTASEATGA-----PTPPPAPPSPAPPPVVPVVEEKE	828
374	DB	EPVAEPTPODKSSPVEEAAVEAPPAEESAASEESTPVEEAAPTESAESAESAPEAT	433
829	QY	BETA-----AAPPVEGEBOKPPAAABELAVDTGKAE--PVKSBCTBEAE--EGKAGKDA	880
434	DB	ESISVGEPAADAEEGLRESAHEEPAPVEDAPAEPAVPEEPAAESPSVEDPAPVPEE	493
881	QY	EAAEATAEGALKAEEKGSGRATTAKSGCAPODSSSATSADVEDAEAGGDKNLLSP	940
494	DB	APAEAPAAAEEIETPEAPAEVPEAPVEEPAVQPEAPAEPTPVKSPVEESAPAEERI---	550
941	QY	RPSLLPTGD--PRANASPOKPLDKOLKORAAAIPIQTVKHPREPPREDAAPTKPPAP	999
551	DB	-----PVEEAPAEESTPAEPVVEVPAEISA--PVEPAVPEEPAEAPPTESAREEP	602
1000	QY	PPQNLQPSDAPQOQSSPRGSRSPAP--PADKEAFAAEAQKLPGDPCWTSGLPFV	1057
603	DB	APME-----EAPTEESASVEPASVEPAVPEPGVPEEPAEAAAEIPEAEP--AVVEGA	653
1058	QY	PPEVTKASPHAPDDSAFSAVPCHPLPLGLHDTARPLPRPTISNPP---PLISSAKH	1114
654	DB	PVEESPVPKEAAPVDAEFSEETPD--PTPVEISRIDIDALEPLEAALPAVWPVATAAEH	710
1115	QY	PSVLEBQIGAIQSGMSVOLHVHPYSEHAKAPVGPVTMGLPLPMDPKKLAPFSG-----	1166
711	DB	ARRKKR--SPDEGQ-----RRHSKSSSEVRRSL-----PRKPESSGILLDRWNK	755
1167	QY	-----VKBQLSPRGQAGPESL-----GVPTAQEASVLRGTA	1199
756	DB	ALBEAKRQHEEKLRLQBELRSKQFRTPKAEARDRHSRERHKRSRSEKAAAV-----	810
1200	QY	LGSVPGSGITKGPSTRVSDSAITVRSITHGTPADVLYKGTITRIIGEDSPSLDRGR	1259
811	DB	-----DVKHSRRRPERGATSEYVERSSGEKAAVPIE-----PSR--RTR	846
1260	QY	EDSLPKGHVIYEGKGHVLSYEGGMSVTQCSKEDGRSSSGPPHETAAPKRTYDMGCRVG	1319
847	DB	EHS-----SSQGG--ERRSTSRDGHSSVSKPRAFLKYMTAETSETNGPLL	889
1320	QY	RAITSSASIEGLMGRAPPRERHSPHLHKEQHIRGSITQGPISRYVEAQEDYLREAKLX	1379
890	DB	KINGDKAAANVLGRSSPS-HSHSH-RHSHEGRGS--DRSTSSHHAEEQEQARRERRARR	945
1380	QY	REGTPPPPPPSRDLTBAKTKQALG	1403
946	DB	RAAEEVEQAKERATDHRHRHSG	969

RESULT 60

US-10-291-265-243

Sequence 243, Application US/10291265

Publication No. US20030232054A1

GENERAL INFORMATION:

APPLICANT: Hyseq, Inc.

APPLICANT: Tang et al

TITLE OF INVENTION: No. US20030232054A1el Nucleic Acids and Polypeptides

FILE REFERENCE: 21272-017 (785)

CURRENT APPLICATION NUMBER: US/10/291,265

; CURRENT FILING DATE: 2000-01-25
; PRIOR APPLICATION NUMBER: 09/491,404
; PRIOR FILING DATE: 2000-01-25
; PRIOR APPLICATION NUMBER: 09/617,746
; PRIOR FILING DATE: 2000-07-17
; PRIOR APPLICATION NUMBER: 09/631,451
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: 09/633,870
; PRIOR FILING DATE: 2000-09-15
; NUMBER OF SEQ ID NOS: 944
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 243
; LENGTH: 1464
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-291-265-243

Query Match 3.08; Score 396.5; DB 15; Length 1464;
Best Local Similarity 21.48; Pred. No. 7.4e-10;
Matches 379; Conservative 102; Mismatches 643; Indels 647; Gaps 83;

QY 722 EALHASGNEVPRGECSPATVNNSSDTEIPSPHTEAAK-DTGONGPKPPA-TLGDGPP 779
DB 77 ETNCPGAEPVEECC-PVCPDSESEPTDQETTCVEGPKGDTGPRGRGAPGPRDGIP 135
QY 780 -----PGPTTPRRTSRAPTEPTPASEATCAPTP-----P 810
DB 136 GQPLPGPPGPP-----GPPGPPGLGNGFAPQLSYGYDEKSTGGISVP 178
QY 811 APSPSAP-----PPVVKKEKEEETAAPVPEGE-----EQPPAAEBELAVDTGK 857
DB 179 GPMGSPGRPLGPPGAPGQGQ-----GPPGEPGEGASGMPGPPGPPGKNGDDGE 234
QY 858 AEPVVKSECTEEAEAGPAKADAEATAEAGLKAEEKGGSGRATTAKSSGAPQDSDS 917
DB 235 AGPGR-----PGERGPPGQAGRLPGTA--GLPGMKHGRGSLDGAAGDAGP 282
QY 918 SATCSADEVDEAGGDKNRLSP-----RPSLLTPTGDPFRANASFPKPLDLKQLKRAAAI 973
DB 283 -----AGPKGEGSPCENGAPQGMGPRGLPGERGAP-----GPGAR 322
QY 974 PPTQVTKVHPREDAAFTPA--PPAPPPONTQPESDAPQPGSS--PRGKSRSPAPP- 1029
DB 323 GNDGATGAAGPP-----GPTGAPGPPGPPGAVGAKGEA--GPQGRSGEPQGVGEGPPG 377
QY 1030 -----ADKEAFAAEAKLPGDPPCWTSGLP-FVVPREVITKASPHAPDPSAFS 1076
DB 378 PAGAAGPAGNPGADGQPGAKGANGAPG-----TAGAPGPPGARGPSGPPGPPGPKGN 432
QY 1077 YAPPGHPLPLGLHDTARVLPRTPTISNPPPLISSAKHPSVLERQIGAIQCMGSLVHVP 1136
DB 433 SGEPGAPSGK--DTGAKGEPGVGVQGP-----GPAEGSKRG----- 470
QY 1137 YSEHAKAPGVFTWGLPLPMDPKLAPFSGVKEQLSPRQAGPPESLGVPVTTQEAASVLR 1196
DB 471 -----ARGEGPT--GLP-----GPPGERGPPGSRGPPGADGVAGPK 505
QY 1197 GTA--LGSVPGGSTIKGIP--STRVPSDSALTIRGSIITHGTPADVLYKGTITRIIGEDSPS 1253
DB 506 GPAGERS--PGAPGPKSGEAGRPGEGAGLFGAKGLT--GSPGSPGPDGK-----TGPPGPA 559
QY 1254 RLD-----RGREDSL-----PKGHVITYEKGKHLVSYEGM-----SVTQCKED 1293
DB 560 GDGRPGPPGPPGARGAAGVMPGPPKGAAGEFGKAG-----ERGVPPGPPGAVGAPGKDG 614
QY 1294 GRSSGPPHETAAPKRTYDMMEGRVGRAISSAIEGLMGRAIIP--ERHSPHLLKQHHIR 1352
DB 615 EAGAQQPP--GPAGPAGE-----RGEQGA--GSPGFQGLPGPAGPPGEGAKPGE----- 660
QY 1353 GSITQGIIPRSYVQAQEDYLREAKLLKREGTPPPPPPSRLTETAYKTQALGPLK--PA 1410
DB 661 -----QGVPGDLGAPGSPGARGERGPPGPPGPPGPA-----GPRGANGAPG 704

RESULT 61

US-09-816-669A-14
; Sequence 14, Application US/09816669A
; Patent No. US20020137019A1

QY 1411 HEGIVATVKEAGRSIHIEIPREELRHTPELPLAPRPLKEGSIQTGTP-----LKYDTGASTT 1466
DB 705 NDGAKG---DAG-----AFGAP-----GS--QCAPLQGMPPGGAAGL 738
QY 1467 GSKKHD-----VRSLLIGSGR-----TPP--PVHPLDVWADARALERACRYEESLKSRRPG 1513
DB 739 PGPKGDRGADGPKGADGSPGKGVRLGTGPIGPPGAPAGPD-----KESG 785
QY 1514 TASSGGSIARGAPVIVPELGKPRQSLTYVEDHGAPFAGHLPRGSPVTMREPTPRLEGS 1573
DB 786 PSGPAGPTGARGAPGRGREGPP--GPAGFA--GPPGAD--GQPKAGEPGDAGAKGD 837
QY 1574 LSSSKASQDRKLTSTPREIAKSPHSTVPEHHPI-----SPYEHLLRGVSGVDLYRSHIP 1629
DB 838 -----AGPPGAPGAPGPPGPIGNVGAPGAKGARGSGAP----- 870
QY 1630 LAFDPTSPRGIPLDAAAYVLPRLAPNPITYPHLYPPYLRGVPDTPAALNHTQIINDY 1689
DB 871 -----PGATGPPGAAGRVGP-----PGPS--GNAGPP-----GPPGAPGKGGKPRGE- 912
QY 1690 ITSQOMHNTATAMARADML-----RGLSPRESSLALNVAAGPRGIIDLQVPP 1738
DB 913 -----TGPAGRPGCEVGPVPPGPAKEGSGPCADGAPAGPCTGPGQIAGORGVV 961
QY 1739 HLPVLVPPT--POTPATAMDRLAYLTPAPOPFSSRRHSSPLSPGCGTHLTKPTTTSSSR 1796
DB 962 GLPGQGERGFPGLPSPGSE-----PKQGPFGASGERGPPGPMGPPGLAGPPGSGRE- 1015
QY 1797 ERDRDRERDREREKSLTSTTTTVEHAPLWRPCTEQSSSSSSSSSSSSSSSSSSSSSSSSSS 1851
DB 1016 -----GAPGAGSPGRDGSPPGAKGDRGTGAPGP 1045
QY 1852 ASHSHAHQSPISPRQTQDALQORPSVLNHTGMGIITAVEPSPKPTVLRSTSTSPVRPAA 1911
DB 1046 GAGCAGACGCPVCP-----AGKSGDRGETCPAG-----AGPVCPVG 1082
QY 1912 TFPPTHCPGLGTLGTVYPTLMEPVLVLPKEAPRVARPERADTGH----- 1957
DB 1083 ARGF-----AGPQGRGDKGETGEQGRGIKGRHG 1112
QY 1958 -AFLAKPPARSGLPEPASSKSGSEPRPLVPVPSGHATIAITPAKNLAPHASDPDPAPPA 2016
DB 1113 FSGLOQPPGPPGSPGSPGSGASGP-----AGPRGPPG 1145
QY 2017 SASDPHREKTQSPFQIQLSLRSLGVHSSYSPEGVPSVSSPSLTHDKGLPKHLEE 2076
DB 1146 SAGAPKDGGLNGLPGFI-----GPPGRGRTGAGPVGPPGPPG----- 1184
QY 2077 LDKSHLEGLRKPQGPVKLGGEAAHLPHLRPLPESQPSSPLLQTAPGVKHHQ----- 2130
DB 1185 -----PPGPPGPPSAGPDFSFLP-----QP-----PQKAHDGGRYR 1217
QY 2131 -----RVVTLAQHISEVITQDTRIHPHPOOLSAPLPAFLYSFFGASCPLV 2174
DB 1218 ADDANVVRDRDLEVDITLKSLSQIENIRSPESGRKNPAR-----TC--R 1260
QY 2175 DLRRPSPDLVLPDPDHGAPARGSPHSEGGKRSPEPNKTSVLGG-----GEDGTEPV 2225
DB 1261 DLKNCISDW-----KSGEYWDIDPQCNLDKAIKVCNMETGETCVYPT 1303
QY 2226 SPPEGM-----TEPGHRSADVPLLYLRDGEQTEPSRMGSKSPGNTSQPPAFPSKLTESN 2279
DB 1304 QPSVAQKNWYISKNPDKRHWVFGESMTDGFQFEYG-----GQSDPADVAIQLT--- 1353
QY 2280 SAMVKSKQBEINKLKNTHNRNEFEYNISQGP 2310
DB 1354 --FLRLMSTEASQNTITYCKNSVAYMDQQTG 1382

QY 1528 VIVPELGKPRQSLTVEDHGAPFAGHLPGRSPVMTREPTRLQEGSLSSKASQDR----- 1583
Db 1985 -----PSFYSKEYDNEGT--VDYSETSLADPCSPSPG-ASGSAGKSGDGRPGQK 2033
QY 1584 ----KLTSTPREAKSPHSTVPEHHPPHPISPYEHLRGVSDLYRSHIPLADPTSIPIR 1639
Db 2034 RFTQMTNLQKVLKSCFND-----YRTPTMLECEVLGNDI 2069
QY 1640 GIPLDAAAAY-----LPRHLAPNPT-YPHLYPPYLIRGYPDTAALENRQTI 1685
Db 2070 GLPKVQVWFQNAKAKESKLSMAKHFGINQTSYEGPTECTLCIGIKYSARLSVRDHI 2129
QY 1686 -----INDYITSQ--QMHNTATA--MAQR-ADMLRGLSPRESSLALNYAAGPR 1729
Db 2130 FSQOHISKVKDTIGSQDLSQDKEKVFDPATVRLMAQQELDRI-----KKANEVLGLAAQQ 2184
QY 1730 GIIDLS--QVPHLPVLVPTFGPTATAMDRLAYLPTAPQFFSRHSSPLSPG---GPTH 1784
Db 2185 GMFDNTPLOALNLTAYPALQGIPTVLLPGL-----NSPSLPGFTPSNTA 2229
QY 1785 LTKPTTTSSSERDRDRDREREKSLTSTTTVEHAPIWRPGTEQSSGSSGSGGG 1844
Db 2230 LTPSKPWLGM-----LPSTT-----VPSGL-PTISGLPNKPSSA 2262
QY 1845 GSSSRPASHAHQHSPISPRTQDALQORPSVLHNTMGKIITAVEPSKPTVLRSTSTS 1904
Db 2263 SLSSPTPAQATMA--MGPOQPPQOQQOQOQOV-----QOPPPP----- 2299
QY 1905 SPVRPAATFPATHCPGLGTLDGVYPTLMEPVLVLPKAPRVARPERPRADTGHAFLAKPP 1964
Db 2300 ----PAAQPPPTQLPL-----QOQOQRKDKDSEKVKKEKAHKGKGP-LFVPK 2344
QY 1965 ARSGLEPASSPSGSEPRPLVPVPSGHATTARTPAKNLAPHASPDPPAPPASDPHRE 2024
Db 2345 KEKGEAPTATAATISAPLPTM-----EYAVDPAQLQA-----LOALTSOPTAL 2388
QY 2025 KTQSKPFISIOELRLSIGYHGSSYPGVPSPVSPSLTHDKGLPKHLELDKSHLEG 2084
Db 2389 LT-----SQFLPVFVPGFSPYAPQI----- 2409
QY 2085 ELRPKQPGPVKLGGEAAHLPHLAPL-----PESQSSSPLLOTAPG-----VKGHQRVVT 2134
Db 2410 -----PGALQSG-----YLOPMYGMGLFPYSPALSOALMGLSPGSLLOOYQOYQS 2456
QY 2135 LAQHISEVITQDYTRHHPOQLSAPLPAPLYSPFCASCFVLDLRRPPSDLYLPPDHGAPA 2194
Db 2457 LQALIOOQOQKVOOQPKASQTPVP-----PCA-----PSPDKD-PA 2493
QY 2195 RGSFSEGGKRSPE-----PNKTSVLGGGEDGI-EPVSPPE-----GMT 2232
Db 2494 KESPKPEEQKNTPREVSPLPKLPEEPEAKSADSLYDPFIVPKVQYKLVCRKCQAGFS 2553
QY 2233 EPGHSRAVYPLLYRDEGEQTEPRM-----GSKSPGNTSQPPAFPSKL 2275
Db 2554 DEEAARSHLKSCLFFGQSVVNLQEMVLHVPTGGGGGGGGGGGGGGGGGGGGGGGGGGGG 2613
QY 2276 TENSAMVSKQEQINKLNTHN-----RNEPYNISQPTIEIENWPALITGGLMYRS 2329
Db 2614 CESALCGBEALSQHLESALHKKHTITTAARNNAKEHPSLLPHSACFPDPFSTASTSQSAHNS 2673
QY 2330 -----QAVOSHASTNMGLEAIRKALMGKYDWEESPPLSANAFNPLNASIL 2377
Db 2674 NDSPPPPSAAAPSSASPHASKSWPQVVSRA-----AAKPP-----SFPLSSSTV 2721
QY 2378 PA-----AMPTAAGRSDHTLTSPGGGKAKVSG 2407
Db 2722 TSSSCSTSGVQPSMPTDDYSESDTDLQSKSDGPASPVEG 2761

RESULT 62

US-10-084-846A-5

; Sequence 5, Application US/10084846A

Publication No. US20040006026A1
GENERAL INFORMATION:
APPLICANT: WEITNAUER, GABRIELE
APPLICANT: MUHLERWEG, AGNES
APPLICANT: TREPZER, AXEL
APPLICANT: BECHTHOLD, ANDREAS
TITLE OF INVENTION: AVILAMYCIN DERIVATIVES
FILE REFERENCE: 1974-005
CURRENT APPLICATION NUMBER: US/10/084,846A
PRIOR FILING DATE: 2003-02-25
PRIOR APPLICATION NUMBER: PCT/EP01/09815
PRIOR FILING DATE: 2001-08-24
PRIOR APPLICATION NUMBER: DE 101 09 166.4
PRIOR FILING DATE: 2001-02-25
NUMBER OF SEQ ID NOS: 120
SOFTWARE: PatentIn Ver. 3.2
SEQ ID NO 5
LENGTH: 19723
TYPE: PRT
ORGANISM: Streptomyces viridochromogenes
FEATURE:
OTHER INFORMATION: Protein 3: amino acid sequence encoded by coding strand 1.
OTHER INFORMATION: Start codon: atc, Start position: nucleotide 3.
US-10-084-846A-5

Query Match 3.0%; Score 394; DB 15; Length 19723;
Best Local Similarity 20.2%; Pred. No. 2.1e-08;
Matches 481; Conservative 168; Mismatches 809; Indels 924; Gaps 114;
QY 680 RRKKKAPAAASEEAAFPVVEDEMEASGVSEMEVEEAEAL---HASGNEVPRGEC 736
Db 17290 RRLVPAAPAGRAADRRPDGRRPADRRGCTQHRHTRRRGQARAPDHRGTGRRARAGG 17349
QY 737 SGPATV-----NNSSSTESIPS-----PHTAAKOTGONG----- 766
Db 17350 GGRGTPGRRGGAGDEEAPAGRGAGGAPAAHVRGAGRTGTGAGGGDPRTDRAG 17409
QY 767 -PKPPAT-----LGADGPPP-----GPPTPPRRTSRAPIEPTPASEATGATPPP----- 810
Db 17410 RPRCATAARPGLGRAAPPLGLRGGRPLRLAALRRVLRL--PARRALG-PRPRGGRGV 17466
QY 811 -----ASPS-----PSAPPVVVPEKEEETAAAPPVEEGEQKPPAA 848
Db 17467 PAGRGGRAGQDPGARHAPPGLTARLPGLRHLRPLRPAPDD-----PRRDGARQDDPGH 17521
QY 849 BELAVDTGKAERPVKSECTEEAEAGPAKGAEEATAEGALKAEKKEGSGRATTAKS 908
Db 17522 RTRAPRRRGAEP-----HGLSGQR----- 17543
QY 909 SGAPOQSDSSATCSADEVD-----EAEGGDKNRLLSPPS-----LLTPTGDPANASPOKP 960
Db 17544 -----ADQLPDGDEAQAARDTAARPRPAGRVRLGCGRRRGHH----- 17584
QY 961 LDLKQLKQRAAIIPTIQ-----VTKVHPPREDAAPTKAPP-----AP 999
Db 17585 -----LRRAGLPGARGRRRGHARRGRLPREE-----PDPPLHGLRLVGGALRPRAVP 17634
QY 1000 PPNQLQPSDAPQOQSSSPRGSKRSRSPADKAEFAAEAKLPGDPPCWTSGLPVPVP 1059
Db 17635 DRYAHGEPRGV-PPGADP-----PARAGGHRARRRGGLQGVQGGRTGLSAPQP- 17686
QY 1060 REVIKASHPAPPSAFSYPAPPHPLPLGLHDTARPVLPPTTISNPPPLTSSAKHPSVLE 1119
Db 17687 -----AGPFR-TPGA-----PAHGRVGAHQHGGGGLPR-----GRAR 17719
QY 1120 RQIGALSQKMSVOLHVPYSEHAKAPVGPVTMGLPLPMDPKLAPFGVQEQSLSPRGQAG 1179
Db 17720 RQLHGDAGQ-----GVRASGAVREGAPAAARD-----RGRERRAEGRGVLR 17760
QY 1180 PRESGLVPTAQEASVLRT-ALGSPVGGSTTKGIPSTRVPSDAITYRGSITHGTADVL 1238
Db 17761 VPGRTSGT-----RGAHGRARGGSRPAGRAGR-----RGASHSGCAGPGG 17804

Query Match 3.0%; Score 392.5; DB 14; Length 1464;
Best Local Similarity 21.3%; Pred. No. 1.1e-09;
Matches 378; Conservative 102; Mismatches 638; Indels 659; Gaps 84;

QY 722 EALHASNEVPRGCSGPAATVNNSDTESIPSHTEAAK-DTQNGPKPEA-TLGDGPP 779
DB 77 ETKNCPGAEVPEGCC-FVCPDSESESTDETTGVGPKGDTGPRGRGAGPGRDGI 135
QY 780 -----PGPTPPRRTSRAPTEPTPASEATCAPTPP-----P 810
DB 136 GQGLGCPGPP-----GPPGPGGLGNFARQLSYGVDEKSTGGSVP 178
QY 811 APPSPSAP-----PPVVPKEEKEETAAPVVEGE-----EQKPPAAEELAVDTGK 857
DB 179 GPMGSPGRLGPPGAPGQGGQ-----GPPGPGPCASCPMGRPPGPPCKNGDDGE 234
QY 858 AEEPVKSECTEABEGPAKDAEABATAEGALKAEKKEGSGRATTAKSSCAPQSDS 917
DB 235 AGKPGR-----PGERGPPGQARGLPGTA--GLPGMKHGRGFGSLDGAKGDAGP 282
QY 918 SATCSADEVDEASGGDKNRLSP-----RPSLLTPTGDPRANASPOKPLDLKQLKRAAAI 973
DB 283 -----AGKPGSGSGEAGCAPQCMGPRGLPGERGRGAP-----GPAGAR 322
QY 974 PPIQVTKVHEPPREDAAPTKPA-PPAPPPPNLQPSDAPQPGSS--PRGKRSRAPP- 1029
DB 323 GNDGATGAAGPP-----GPTGAPGPPGPGVAGAKGEA-GPGPRGSEGPQVGRGEPGPG 377
QY 1030 -----ADKEAFAAEAKLPGDPPCWTSGULP-FVPVPREVIKASPHAPDSAFS 1076
DB 378 PAGAAGPAGNPGADGPGAKGANGAPG-----IAGAPGFGAGSPGQPGGPPGPKGN 432
QY 1077 YAPPGHPLPLGLDHTARVLP-PPPTTSNPPPLISSAKHPSVLBRQICALISQMSVOLHVP 1136
DB 433 SGEPGAPGSKG--DTGAKGEFPGVQVGP-----GPAGEGKKG-----470
QY 1137 YSEHAKAPGVFTWGLPLPMDPKLAPFGVKOEQLSPRQAGPPESLGVPTAQEASVLR 1196
DB 471 -----ARPEGPT--GLP-----GPPGERGPGSGRPGFAGDGVAGPK 505
QY 1197 GTA--LGSVPGSGITKIP-STRVPSDSAITYRGSITHTGTPADVLYKGNITRIIGDSPS 1253
DB 506 GPAGERSG-FGPAGPKSGPGEAGRPGEGAGLPGAKGLT-GSPGSGPDGK-----TGPPGPA 559
QY 1254 RLD-----RGREDLSL--PKGHVITYGKXGHVLSYEGGM-----SVTQCKED 1293
DB 560 QQGRGPGPPPGARGAGVGMGPPGKGAAGEFGKAG-----ERGVPGPAGVGPAGKDG 614
QY 1294 GRSSGPPHETAAPKRTYDMWGRVGRATISSASIEGLMGRAIPP-ERHSPHLKEQHHR 1352
DB 615 EAGAAGPP-GPAGPAGE-----RGEQGA-GSPGFQGLPGPAGPFGGAGKPGE-----660
QY 1353 GSTOQIPRYSYEAQEDYLREAKLLKREGTPPPPPPSRDLTEAYKTQALGPLKLK--PA 1410
DB 661 -----QGVPGDLGAPGSPGARGERGFGERGVQGPAGA-----GPRGANGAPG 704
QY 1411 HEGLVATVKEAGRSIHEIPRELRHTPELPLAPRLKEGSIITGTP-----LKVDTCASIT 1466
DB 705 NDGAKG--DAG-----APGAP-----GS--QAGFQGMGERGAAGL 738
QY 1467 GSKKHD-----VRSLSIGPGR-----TFP--PVHPLDVMADARALERACYEBSLSRPG 1513
DB 739 PGPKGRGDGAPKADGSPCKDGVRLGTGPIGPPGAPAGPD-----KGESG 785
QY 1514 TASSSGSITARGAPVIVPELGKPRQSPPLTYEDHAGAPAGHLPGRGSPVWREPTPRLOEGS 1573
DB 786 PSGPAGPTGARGAPGRGEPGPP--GPAGFA--GPPCAD-----GQPCAKGEPDAGAKGD 837
QY 1574 LSSSKASQDKRLTSTPREIAKSPHSTVPEHHPI-----SPYEHLLRGVSGVDLYRSHIP 1629
DB 838 -----AGPGPAGPAGPFGPIGNVGAFAKAGSGAGP-----870
QY 1630 LAFDPTSIPIRGIPLDAAAAYLPRHLAPNPTYPHLYPPYLRGYPDTAALENRQTINDY 1689

871 -----PCATGFPAGACRVGP-----PGPS-GNAGPP-----GPPGAGKEG-----905
1690 ITSQOQMHNTATAMAQADWLRLGLSPRESSLALNYAAGPRGIDLSQVPHLPVLVPTPG 1749
906 -----GKPRGET-----GPAG-----RPEVGP-PG 926
1750 TPATAMDRILAYLFTAPQPFSSRHSSSPLS-----PGGPHLTJKPTT 1790
927 PPGPAGEKGS--PGADGPAGAPCTGPGQGIAGQGVVGLPGQGERGFFGLPGPSGPGK 984
1791 TSSSERDRDRDRDRDRREKSIILTSITTVHEAPIWRPGTEQSSGSSSSG-----GGG 1845
985 QGPGSAGSERG-----PPGMPGPPCLAGPPGSGREGAPAAEGSP 1024
1846 GSSSRPASHAHQHSPISPRTQDALQORPSVLHNTGMKIITAVRPSKPTVLRSTSS 1905
1025 GRDGSFGAKDGRGETGPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPG 1076
1906 PVRPAAATPPATHCPLGLGLDGVYPTLMPEVLLPKEAPRVARPERPRADTGH-----1957
1077 PVGPVARGP-----AGPQGRGDKGTEGQDGRG 1106
1958 -----AFLAKPPARSGLPEASSPSKSGSEPRPLVPPVSGHATIAKTLAPLPHASPD 2010
1107 IKHGRFGSLQGGPPGPPGSGPGEQGPSGASGP-----AG 1139
2011 PPAPPASADPHREKTQSKPFSIQELELSLGVHSSSYSPGVEPVSVSSPSLTHDKGL 2070
1140 PRGPPGSAGAKGDLNGLPGPI-----GPPGRGRTGAGVPVGGPPGPG-----1184
2071 PKHLELDKSHLEGELEPRKQPGPVKLGGEAAHLPHLRPLPESQPSSSPLLQTAQVKGHQ 2130
1185 -----PPGPPGPPSAGFDFSLP-----Qp-----PQEKADH 1211
2131 -----RVVTIAQHISEVITQDTRHHHPQOLSAPLAPLYSFPG 2168
1212 GGRYVRADDANVVRDRDLEVDVITLKSLSQOIEINIRSPGSRKNPAR-----1257
2169 ASCPVLDLRRPSDLPLPPDHGAPARGSPHSGGKRSPEPNKTSVLGG-----GE 2219
1258 -TC--RDLKMCSDW-----KSGEYWDIPNQCNDLAKVFCNMETGE 1297
2220 DGTEPVSPPEGM-----TEPGHRSAYVPLLYRDGEQTEPSRMGSKSPGNTSQPPAFS 2273
1298 TCVPYTPQPSVAQKNWYISKPKDKRHVWFESMTGCFEYG-----GQGSDDPADVAI 1350
2274 KLTESNAMVKKQKQKINKLTHNNEPEYINISQPG 2310
1351 QLT-----FLRLMSTEASONITYHCKNSVAYMDQQTG 1382

RESULT 65
US-10-171-311-36
; Sequence 36, Application US/10171311
; Publication No. US20030087270A1
; GENERAL INFORMATION:
; APPLICANT: Schlegel, Robert
; APPLICANT: Chen, Yan
; APPLICANT: Zhao, Xumei
; APPLICANT: Monahan, John
; APPLICANT: Kamatkar, Shubhangi
; APPLICANT: Glatt, Karen
; APPLICANT: Gannavarapu, Manjula
; APPLICANT: Hoerhsh, Sebastian
; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
; TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY
; TITLE OF INVENTION: OF CERVICAL CANCER
; FILE REFERENCE: MRI-035
; CURRENT APPLICATION NUMBER: US/10/171,311
; CURRENT FILING DATE: 2002-06-12
; PRIOR APPLICATION NUMBER: US 60/298,159
; PRIOR FILING DATE: 2001-06-13

; CURRENT FILING DATE: 2002-06-10									
; PRIOR APPLICATION NUMBER: PCT/GB00/04741									
; PRIOR FILING DATE: 2000-12-12									
; PRIOR APPLICATION NUMBER: GB 929487.8									
; PRIOR FILING DATE: 1999-12-15									
; NUMBER OF SEQ ID NOS: 14									
; SOFTWARE: Patent in Ver. 4.0									
; SEQ ID NO 2									
; LENGTH: 1464									
; TYPE: PRT									
; ORGANISM: Homo sapiens									
US-10-149-352-2									
Query Match 3.0%; Score 392.5; DB 14; Length 1464;									
Best Local Similarity 21.3%; Pred. No. 1.1e-09;									
Matches 378; Conservative 102; Mismatches 638; Indels 659; Gaps 84;									
QY	722	EALHAGNEVPRECGSPATVNNSTESIPSPHTEAAK-DTGQNGPKPPA-TLGDAGPP	779						
Db	77	ETKNCFCAEVPEGCC-PVCPDSESPTDQETTVGEGPKGDTGPRGPRGPPGPRDGIP	135						
QY	780	-----GGPTTPRTSRAPTEPTASEATCAPTPP-----	810						
Db	136	QOGLPGPPGPP-----	178						
QY	811	APPPSAP-----PPVVPKEEKEETAAAPPVEEGE-----	857						
Db	179	GPMPGSPGRLCPGPPAGPQGFQ-----GPPCEPGFGASGMPGPRGPPGPKNGDGE	234						
QY	858	AEEFVKSECTEAEAGPAKGDAAEABATAAGALKAEKGGSGRATTAKSGAPQSDS	917						
Db	235	AGKPRG-----PGERGPPGQARGLPCTA--GLPGMKHGRGSLDGAKDAGP-----	282						
QY	918	SATCSADEVDEARGGDKNLLSP-----RPSLLTPTGDPANASPOKPLDLKQKQAAAI	973						
Db	283	-----AGPKGFGSGENGAPQMGFRGLPGERGPGAP-----	322						
QY	974	PPIQVTKVHEPPREDAAFTKPA--PPAPPPQNLPESDAFPQPGSS--PRGKSRSPAPP--	1029						
Db	323	GNDGATGAACPP-----GPTCPAGPPFGAVGAKGEA--GPGPRGSEGGQVGRGEPGPG	377						
QY	1030	-----ADKEAFABAQKLPDPPCWTSGLP--FPVPREVIKASHPADPSAFS	1076						
Db	378	PAGAAGPAGNPGADGQFGAKGANGAPG-----IAGAPFPGARGSPGQPGGPPGPKGN	432						
QY	1077	YAPPGHPLPLGLHDTARPLVLPREPTTISNPPPLISSAKHPSVLEROIKAISQGSVQLHVP	1136						
Db	433	SGEFGAPGSKG--DTGAKGEPGVGVQGGP-----GPAGEGKRG-----	470						
QY	1137	YSEHAKAPGVPTWGLPLPMDPKLAPFSGVKQELSPRGQAGPPPSLGVPTAQEASVLR	1196						
Db	471	-----ARGEPCPT--GLP-----	505						
QY	1197	GTA--LGSVPGGITKGP--STRVPDSDAITYRGSITHTGPADVLYKGIITRIIGBDSPS	1253						
Db	506	GPAGERGS--PGAPAGKSGPCEAGRGEAGLPGAKGLT--GSPSGPGDGK-----	559						
QY	1254	RLD-----RGEDSL-----PKGHVYEGKGVLSVEGWM-----SVTQCSKED	1293						
Db	560	QDGRGPPGPPGARGQAGVMGPPGKGAAGEPKAG-----ERGVGPPGAVGAPGAKDG	614						
QY	1294	GRSSGPPHETAAKRTYDMMEGRVGRAISSASIEGLMGRATPP--BRHSPHLKKEQHTR	1352						
Db	615	EAGAQQPP--GPAGPAGE---RGEQGA--GSPGFQGLPGPAGPPGAGKPE-----	660						
QY	1353	GSITQGISPSYVAQEDYLRREAKLLKRGTPPPPPPPSDLTETAYKTQALGPLKUK--PA	1410						
Db	661	-----QGVPGDLGAPGSGARGERGFPGERGVQVQPPGA-----	704						
QY	1411	HEGLVATVEAGRSIHEIPREELRHTELPPLAPRPLKEGSIQTGP-----LKVDTCASIT	1466						
Db	705	NDGAKG---DAG-----	738						

RESULT 67
US-10-177-293-65
; Sequence 65, Application US/10177293
; Publication No. US20030124128A1
; GENERAL INFORMATION:
; APPLICANT: Lillie, James
; APPLICANT: Glatt, Karen
; APPLICANT: Zhao, Xumei

APPLICANT: Gannavarpu, Manjula
APPLICANT: Kamatkar, Shubhangi
APPLICANT: Mertens, Maureen
APPLICANT: Myer, Vic
APPLICANT: Wang, Youzhen
APPLICANT: Xu, Yongyao
APPLICANT: Hoersch, Sebastian
APPLICANT: Monahan, John
APPLICANT: Meyers, Rachel E.
APPLICANT: Bast Jr., Robert C.
APPLICANT: Hortobagyi, Gabriel N.
APPLICANT: Puzstai, Lajos
APPLICANT: Meric, Funda
APPLICANT: Sahin, Aysegul
APPLICANT: Mills, Gordon B.
TITLE OF INVENTION: COMPOSITIONS, KITS, AND METHODS FOR IDENTIFICATION, ASSESSMENT,
FILE REFERENCE: MRI-038
CURRENT APPLICATION NUMBER: US/10/177,293
PRIORITY FILING DATE: 2002-06-21
PRIORITY FILING DATE: 2001-07-18
PRIORITY FILING DATE: 2001-06-21
PRIORITY FILING DATE: 2001-06-21
PRIORITY FILING DATE: 2001-06-27
PRIORITY FILING DATE: 2001-06-27
PRIORITY FILING DATE: 2001-07-18
PRIORITY FILING DATE: 2001-09-25
PRIORITY FILING DATE: 2001-09-25
PRIORITY FILING DATE: 2002-03-05
PRIORITY FILING DATE: 2002-03-05
PRIORITY FILING DATE: 2002-05-14
NUMBER OF SEQ ID NOS: 506
SOFTWARE: Fast-Seq for Windows Version 4.0
SEQ ID NO 65
LENGTH: 1464
TYPE: PRT
ORGANISM: Homo sapiens
US-10-177-293-65

Query Match 3.08; Score 392.5; DB 14; Length 1464;
Best Local Similarity 21.3%; Pred. No. 1.1e-09;
Matches 378; Conservative 102; Mismatches 638; Indels 659; Gaps 84;
QY 722 EALHASGNEVPRGECSPATVNNSSDTEIPSPHTEAAK-DTGONGPKPPA-TLGDGPP 779
DB 77 ETNCPGAEPVEGCC-PVCPDSESTDETTGVEGPKGDTGPRGRGAPGRDGP 135
QY 780 -----PGPTTPRRTSRAPTEPTPASEATCAPTP-----P 810
DB 136 GQPLGPPGPP-----GPPGPPGLGNGFNAPQLSYGYDEKSTGGISVP 178
QY 811 APPSPSAP-----PPVVPKEKEEETAAAPVEGE-----EQPPAAEELAVDTGK 857
DB 179 GPMGSPGRLGPPGAPGQGFQ-----GPPGPEPGASGPMGPRGPPGKNGDDGE 234
QY 858 AEPVVKSECTEEAEAGPAKGADEAAEATAEGALKAEEKGGSGRATTAKSSGAPQDS 917
DB 235 AKRGR-----PGERGPPGQARGLPCTA--GLPGMKHGRGSLDCAKGDAGP-----282
QY 918 SATCSADEVDEAGGDKNRLSP-----RPSLLTPTGDPNANSPQKPLDLKQLKRAAAI 973
DB 283 -----AGPKGPGSPGNGAPQMGPRGLPGERGRGAP-----GPAGAR 322
QY 974 PPTQVTKVHPREDAAPTPA-PPAPPPQNLQPEDAFOQPGSS--PRGKRSRAPP- 1029
DB 323 GNDGATGAAGPP-----GPTGAPGPPGPPGAVGAKGEA-GPQGRGSEGPGQVGRGPPG 377
QY 1030 -----ADKEFAFAEAQKLPDPPCWTSGLP-FVPPPREVIKASPHAPDPSAFS 1076
DB 378 PAGAAGPAGNPGADGQPGAKANGAPO-----TAGAGFFGARGPSGPGQPGPGPKGN 432
QY 1077 YAPPGHPLPLGLHDTARVPLPRPTTISNPPPLISSAKHPSVLERIQIGAISQGMVQLHVP 1136

DB 433 SGEPGAPSGK--DTGAKGEPGVGVQGP-----GPAGEGKRG-----470
QY 1137 YSEHAKAPGVMTMGLPLPMDPKLAPFSGVKQELSPRQAGPPESLGVPTAQEASVLR 1196
DB 471 ----ARGEPGT--GLP-----GPPGERGPGSRGFPAGDGVAGPK 505
QY 1197 GTA--LGSVPGGSITKGP-STRVPSDSAITYSGSIHTGTPADVLYKGTITRIIGEDSPS 1253
DB 506 GPAGERGS-PGPAGPKGSPGEACRPGEAGLPGAKGLT-GSPGSPGPDGK---TGPPGPA 559
QY 1254 RLD-----RGREDSL-----PKCHVYEGKKGHVLSYEGGM-----SVTQCKED 1293
DB 560 GQDRFRGPPGPPGARGQAGVMGPPGPKAAGEFKAG-----ERGVGPPGCAVGPAGKDG 614
QY 1294 GRSSGPPPHETAAPKRTYDMWGRVGRATISSASIEGLMGRAIPP-ERHSPHLKEQHHR 1352
DB 615 EAGAQQPP-GPAGPAGE-----RGEQPA-GSPQFQGLPGPAGPGEAGKGE-----660
QY 1353 GSITQIPRSYVEAQEDYLRREAKLLKREGTPPPPPPSRDLTAYKTQALGPLKJK--PA 1410
DB 661 ----QGVPGDLGAPGSPGARGERGFPCERGVOGPPGPA-----GPRGANGAPG 704
QY 1411 HEGLVATVKEAGRSIHIEIPRELRHTPELPLAPRPLKEGSIQTGP-----LKDYTGASTT 1466
DB 705 NDGAKG---DAG-----AFGAP-----GS--QCAPGLOGMPGERGAAGL 738
QY 1467 GSKKHD-----VRSLLIGSGR-----TFP--PVHPLDMADARALERACYEESLKSRRPG 1513
DB 739 PGPKGRDAGPKGADGSPGKGVRLTGIPGPPGAPGD-----KESG 785
QY 1514 TASSGSGSIARGAPVIVPELGKPRQSPLYYEDHAPPAGHLPGRGSPVMTREPTPRLOEGS 1573
DB 786 PSGPAGTGTARGAPGDRGERGPP--GPAGPA--GPPGAD---GQPAKGEPPGDAGAKGD 837
QY 1574 LSSSKASQDRKLTSTPRETAKSPHSTVPEHHPI-----SPYHLLRGVSGVDLYRSHIP 1629
DB 838 -----AGPEPGAPGAPGPPGIGNVGAPGAKGARSAGP-----870
QY 1630 LAFDPTSIPIRGIPLDAAAAYLPRHLAPNPTYPHLYPPYLRGVPTDAALENQTIINDY 1689
DB 871 -----PGATGFPGAARVGP-----PGPS-GNAGPP-----GPPGAPGEG-----905
QY 1690 ITSQMHNTATAMAQRADMLRGLSPRESSLALNYAAGPRGIIDLQVPHLPVLPPTPG 1749
DB 906 -----CKGRGET-----GPAG-----RPEVGP-PG 926
QY 1750 TPATAMDRLAYLPTAPQPFSSRHSSPLS-----PGPHTLTKPTT 1790
DB 927 PGPAGEKGS--PGADGPAGAPGTGPGGIAGQGVVGLPGQGERGFGLPGSPGPGK 984
QY 1791 TSSSERDRDRDRDREREKILSTTTTVEHAPIWRPGTEQSSGSSGSSG-----GGG 1845
DB 985 QGSPGASGEG-----PPGMPGPPGLAGPPGSGREGAPAAEGSP 1024
QY 1846 GSSSRPASHASHAHQHSPISPRTQDALQORPSVLHNTGMKGIITAVEFSKPTVLRSTSS 1905
DB 1025 GRDGSFGAKGDRGETGAPGPPGAPGAPGAPGVPVGPAGKSGDRGETGAPG-----AG 1076
QY 1906 PVTPAATFPFATHCPLGGLDGVYPTLMEVLLPKCAPRVARPERPRADTGH-----1957
DB 1077 PVGPVGARG-----AGPQGRGKGETGEOQDRG 1106
QY 1958 -----AFLAKPPARSGLEPASSPSKSGSEPRPLVPVPSGHATTARTPAKNLAPHASPD 2010
DB 1107 IKHGRFGSLGQPPGPPGPPGSGEGSGASGP-----AG 1139
QY 2011 PPAPPASADPHREKTQSKPFSTQELRLSLGYHSGSYSPGVEPVSPVSSPSLTHDKGL 2070
DB 1140 PRGPPGSAAGPKDGLNGLPGPI-----GPPGPRGTGDAGVPVGPVPPG-----1184
QY 2071 PKHLELDKSHLEGERLPKQPGVVKLGGEAAHPLHLRPLPESQFSSPSLLQTTAPGVKHQ 2130

```
Db 1185 -----PPGPPGPPSAGDFSLP-----QP-----PQKAHD 1211
Qy 2131 -----RVVTLAQHISVITQDVTTRHHPQQLSAPLPAPLYSFFG 2168
Db 1212 GGRYYRADDANVRDRDLEVDVTLKLSQOENIRSPGSRKNPAR-----1257
Qy 2169 ASCPVLDRPPSDLYLPPDHGAPAGSPHSGGKRSPEPNKTSVLGG-----GE 2219
Db 1258 -TC-RDLKMKCHSDW-----KSGEWDIDPQGCNLDALKVFCNMETGE 1297
Qy 2220 DGIEPVSPPBGM-----TEPGHRSVAVPYLLVRDGEQTEPSRMGSKSPONTSQPPAFPS 2273
Db 1298 TCYPTQPSVAQKNWYISKPNKDRHWFGEISMTEGDFQFEYG-----GQSDPADVAI 1350
Qy 2274 KLTESNAMYKSKQKINKLNTHNNEPYNISQPG 2310
Db 1351 QLT-----FLRLMSTEASONITYHCKNSVAYMDQQTG 1382

RESULT 68
US-10-301-822-28
; Sequence 28, Application US/10301822
; Publication No. US20030148410A1
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceuticals, Inc.
; APPLICANT: Berger, Allison
; APPLICANT: Guillemette, Tracy L.
; APPLICANT: Kamatkar, Shubhangi
; APPLICANT: Schlegel, Robert
; APPLICANT: Monahan, John E.
; APPLICANT: Thibodeau, Stephen N.
; APPLICANT: Burgart, Lawrence J.
; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
; METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
; THERAPY OF COLON CANCER
; FILE REFERENCE: MEM01-029P2RNM
; CURRENT APPLICATION NUMBER: US/10/301.822
; CURRENT FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: US 60/339,971
; PRIOR FILING DATE: 2001-12-10
; PRIOR APPLICATION NUMBER: US 60/361,978
; PRIOR FILING DATE: 2002-03-05
; PRIOR APPLICATION NUMBER: US 60/381,988
; PRIOR FILING DATE: 2002-05-20
; NUMBER OF SEQ ID NOS: 228
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 28
; LENGTH: 1464
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-301-822-28

Query Match 3.08; Score 392.5; DB 14; Length 1464;
Best Local Similarity 21.3%; Pred. No. 1.1e-09;
Matches 378; Conservative 102; Mismatches 638; Indels 659; Gaps 84;

Qy 722 EALHASGNEVPRGCSGPATVNNSSDTPSPHTEAAK-DTGQNGPKPA-TLGDAGPP 779
Db 77 ETNCPGAEVPEGCC-PVCPDGESEPTDQETTVGEGPKDGTGPRGRGAPGRDGI 135
Qy 780 -----PGPPTPRRTSRAPTEPTASEATGATPP-----P 810
Db 136 GQCLPGLPPGPP-----GPPGPGGLGNGNFAQLSYGYDEKSTGGISVP 178
Qy 811 APSPSAP-----PPVVPKEEKEEETAAAPVEGE-----EQPPAAEELAVDTGK 857
Db 179 GPMGSPGFRGLPGLPPGAPGQGFQ-----GPPGEPGEPGAGMPGPRGPPGKNGDDGE 234
Qy 858 AEEPVKSECTEEAEEGFAKGDAAEABATAGALKAEKKEGGSGRATTAKSSGAPQSDS 917
Db 235 AKRGR-----PGERGPPGQAGRLPGTA--GLPGMKHGRGSLDGAAGDAGP-----282
Qy 918 SATCSADEVDEAEGGDKNRLSP-----RPSLLTPTGDPFRANASFPQKPLDLKQLKRAAAI 973
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Db 283 -----AGPKGEPGSGENGAPGQMGPRGLPCEERGRPGAP-----GPAGAR 322
Qy 974 PPIQVTKVHEPREDAAPTKPA-PPAPPPPQNQLPESDAPQOPGSS--PRGKSRSAPP- 1029
Db 323 GNDGATGAAGPP-----GPTGPAGPPGFGAVGAKGEA-GPQGPGRSEGGQVRGEGPPG 377
Qy 1030 -----ADKEAFAAEAQKLPGDPPCWTSGLP-FPVPPREVIKASHPADPSAFS 1076
Db 378 PAGNAGPAGNPGADGQPGAKGANGAPG-----IAGAPGPPGARGSPGPGPPGPKGN 432
Qy 1077 YAPPGLPLGLHDTPARVLPVLPPTISNPPPLISSAKHPSVLERQIGALISQMSVOLHVP 1136
Db 433 SGEPGAPGSKG--DTCAKGEPPGVGVQGGP-----GPAGEEGKRG-----470
Qy 1137 YSEHAKAPVPTMGLPLPMDPKKLAPFSGVQEQQLSPRGOAGPPESLCVPTAQAEASVLR 1196
Db 471 ----ARGEPPGT--GLP-----GPPGERGGGSGRGPFGADGVAGPK 505
Qy 1197 GTA--LGSVFSGSITKGIP-STRVPSSDAITVYRGSITHGTTPADLVLYKGTITRIIGBDS 1253
Db 506 GPAGERGS-PGPAGPKGSPGEAGRPGEAGLPKAGGLT-GSPGSPGPDGK---TGPPGPA 559
Qy 1254 RLD-----RGREDSL-----PKHVIYEGKGHVLSYEGM-----SVTQCSKED 1293
Db 560 QDGRPPGPPGPPGARGQAGVWGPPGPKGAAGBFGKAG-----ERGVPGPPGAVGPAKDG 614
Qy 1294 GRSSGPPHETAAPKRTYDMMEGRVGRATISSASIEGLMGRAIPP-ERHSPHHLKEQHHR 1352
Db 615 ERAGQPPP-GPAGPAGE-----RGEQGA-GSPGFQGLPDPAGPPGEGAPGE-----660
Qy 1353 GSITQIPRSYVEAQEDYLREAKLLKREGTPPPPPPSRDLTEAYKTOALGPLK-L-PA 1410
Db 661 ----QGVGDLGAPGSPGARGSGRPPGERGVQGPQGA-----GPRGANGAPG 704
Qy 1411 HEGLVATVVEAGRSIHEIPREBLRHTPELPAPRLKEGSIQCTP-----LKVDTCASIT 1466
Db 705 NDGAKG---DAG-----APGAP-----GS--QGAFLQMGPERGAAGL 738
Qy 1467 GSKKHD-----VRSLLIGSPR-----TFP--PVHPLDMADARALERACYEESLSRPG 1513
Db 739 PGPKDGRDAGPKGADSGFKDGVRLTGIPGPPGAPAGD-----KGESG 785
Qy 1514 TASSGSGSIARGAPVIVPELKGPRQSPPLYEDHGAPFAGHLPRGSPVTWREPTPRLOE 1573
Db 786 PSGPAGTGPARGAPGDRGEPGP--GPAGFA-GPPCAD-----GQPKAGEPGDAGAKGD 837
Qy 1574 LSSSKASQDRKLTSTPREIAKSPHSTVPEHHHPHPI-----SPYEHLLRGVGVDLVRS 1629
Db 838 -----AGPPGAPGAPGPPGPGICNVGAPGAKGARGSAGP-----870
Qy 1630 LAFDPTSIPRGIPLDAAAAYLPRHLAPNPTVPHLYPPVLYRGYPTDALENRQTIINDY 1689
Db 871 -----PGATGFPGAAGRVGP---PGFS-GNAGFP---GPPGPAKGE-----905
Qy 1690 ITSQMHNTATAMAQRADMLRGLSPRESSLALNYAAGPRGIIIDLQVPHLPVLVPTPG 1749
Db 906 -----GKGRGET-----GPAG-----RPGEVGP-PG 926
Qy 1750 TPATAMDRLAYLTPAQPPSSRHSPLS-----PGGPHLTAKPTT 1790
Db 927 PPGPAGEKGS--PGADGPAGAPGTGPGQIAGQGVVGLPFGQGERGFPGLPGPSGEPGK 984
Qy 1791 TSSSERDRDRDRDREREKSIILSTTTTVEHAPIWRPQTEQSSGSSSSG-----GGG 1845
Db 985 QGFSGASGERG-----PPGMPGFLAGPPGSGREGAPAAEGSP 1024
Qy 1846 GSSSRPASHSHAHQHSPISPTODALQORPSVLHNTGMKGIITAVPSPKPTVLRSTSS 1905
Db 1025 GRDGSFGAKGDRGETGPPGAPGAPGAPGPPGVPKAGSGDRGETGAPG-----AG 1076
Qy 1906 PVTPAATFPATHICPLGGTLDGVYPTLMEPVLLPKEAPVARPERPRADTGH-----1957
```

Db 1077 PVGPVGARGP-----AGPQPRGDKGTGEQDGRG 1106
Qy 1958 -----AFLAKPPARGLEPASSKSGSPRPLVPVPSGHATTIARTPAKNLAPHASPD 2010
Db 1107 IKHGRFSGLQGPDPGSGPQEQPGASGP-----AG 1139
Qy 2011 PPAPPASAPHRKTSKSPFSIOELRSLGYHGSYSPEGVPVSPVSPSLTHDKGL 2070
Db 1140 PRGPPGAGAPGDKGLNGLPGPI-----GPPGPRGTGDAGVPGPDPGPG 1184
Qy 2071 PKHLELDKSHLEGELRPKPGPVKLGLGEAAHPLPLRPSPESQSSPFLQTPGVKGHQ 2130
Db 1185 -----PPGPPGSPAGSAGDFSLP-----QD-----POEKADH 1211
Qy 2131 -----RVVTLAQHISEVITQDTRHHHPQQLSAPLAPLAPLYSFP 2168
Db 1212 GGYYRADDAVVRDRDLEVDVTTLSLQSLQENIRSPESGRKNPAR----- 1257
Qy 2169 ASCPVLDRPPSDLYLPDPDHGAPARGSPHSGCKRSPEPKTSVLGG-----GE 2219
Db 1258 -TC--RDLKMKCHSDW-----KSGEYWDIPNOCNLDIAIKVFCNMETGE 1297
Qy 2220 DGTPEVSPPEGM-----TPGHRSRAVYPLLYRDGQTPSRMGSKSPGNTSOPPAFFS 2273
Db 1298 TCYVTPQPSVAQKNWYISKPKDKRHWFGESMTDGFQFEVG-----GQSDPADVAI 1350
Qy 2274 KLTESAMVYKSKQEIKNKLNTHRNPEYNTISQPG 2310
Db 1351 QLT-----FLRLMSTEASONITYHCKNSVAYMDQQTG 1382

RESULT 69

US-10-029-386-33090
; Sequence 33090, Application US/10029386
; Publication No. US20030194704A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharon G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR G
; TITLE OF INVENTION: EXPRESSION ANALYSIS TWO
; FILE REFERENCE: AROMICA-X-2
; CURRENT APPLICATION NUMBER: US/10/029,386
; CURRENT FILING DATE: 2001-12-20
; NUMBER OF SEQ ID NOS: 34288
; SOFTWARE: Annonax Sequence Listing Engine vers. 1.1
; SEQ ID NO 33090
; LENGTH: 1633
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: MAP TO AC027307.3
; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.85
; OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.84
; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 4.8
; OTHER INFORMATION: SWISSPROT HIT: Q61315, EVALUE 1.00e-27
US-10-029-386-33090

Query Match 3.08; Score 391.5; DB 14; Length 1633;
Best Local Similarity 20.58; Pred. No. 1.4e-09;
Matches 383; Conservative 170; Mismatches 647; Indels 665; Gaps 88;
Qy 680 RKKKAKAPAAASBEAAPPVVVEDEMEASGVSGNEEMVEAEALHAS----- 727
Db 153 RRGKEAKETSGEAA---VAARAKAKALAVARIDQVEDISALHTSSDDSFSLSGDP 209
Qy 728 GNEVPR-----GECGSPATVNNSDTESIP-----SPHTEAAKTGQNG----- 766
Db 210 GQAPREGRAQSCPCRGEGRREAGRAHPLRLKAAHASLNSDLSNGSADGYCPR 269
Qy 767 -----PKPATLGA--DCPPPPPTPPRTSRAP---LEPTPASEATCA-----PT 807
Db 270 EHMLPCPLAALASRRDRFCGQPRPSRLDLDLPGCQAEPPAREATSADARVRTIKLSPT 328

Qy 808 PPAP-----PPSPAPPPVVPKBEKE-----BETAAAPVVEGEEOQPP 846
Db 329 YQHVPLLEGASRAEAPLAGPISPGARKQAWLPADHLSKVPEKLAAPLSVASKALQKL 388
Qy 847 AAEELAVDTCKAEPEVKSECTEAEESCPAKGDABAAEAETAEKALKAKEGSGRATTA 906
Db 389 AAQEGPLUSLRCS--LSSLSAGRPGPSEGGDLDDSSLEGL-----BEAGPSEALD 441
Qy 907 KSSGAPQDSSATCSADEVDEAEG-GDKNRLLSRPSLLTPTCDPRANASPKPLDLKQ 965
Db 442 STWRAEATSLPAI PAPNRRCRGLGVED-----ATPSSSE-NYVQETPLVLSR 491
Qy 966 LKORAAAIPQIVKVEHPPREDAAPTKPAPPAPPQNPONQOPESDAPQQGSS--PRKSR 1024
Db 492 CS-----SVSSLSGSPESPIASSIPSEPCSGGSGTISPSSELPDSQCTMPPPSRK 542
Qy 1025 ---SPAPPADKFAFAEAQKLPDPPCMTS-----GLPFPVPPREVIKA 1065
Db 543 TPPLAPAPQGPPEATQFSLQ-----WESYKRFLDIADCRERCKLPSELDAQSV-RF 593
Qy 1066 SPHAPPSAFSYAPPGHPLPLGLHDTARPVLPRPPTISNPPPLISSAKHPSVLERQIGAI 1125
Db 594 TVEKPDEN-FSCASSLSALALHEHYVQDVLR-----LLPSA---CPERGCGAG 639
Qy 1126 SQGMSVOLHVYPYSEHAKAPVPGVTMGLPLPMDPKLAPFSGVKQEQLSRPGQAGPPESLG 1185
Db 640 GAG---LH--FAGHRRREBGPATG-----SRPRGAAD----- 667
Qy 1186 VPTAQEASVLRTALGSPGSGITKGPSTRVPSDSAITYRGSITHTCTPADVLYKGTITR 1245
Db 668 ---QELRECLGAAVP--ARLRKVASALVPGRRAL-----PVFVY-----M 705
Qy 1246 IIGEDSPRLDRGREDSLPKGHVIEYKKGHVLSEYGGMSVTCQSKEDGRSSSGPPHETA 1305
Db 706 LVFAPAPAQEDDSDCTDS-----AEGTFVNFSSAASLSD-----ETLQGPFR--- 746
Qy 1306 AKRTYDMMEGRVGRAISSASIEGLMGRAIPPRHSGPHLKEQHINGSITQGIPIRSYVE 1365
Db 747 ---DQCGGPAGR-----QRTPGRPTPSARQAMGHRHK-----AGGAGRS-AE 783
Qy 1366 AQEDYLRREAKLLKRGTPPPPPSRDLTEAYTQALGPLK---LKAPEGL----- 1414
Db 784 QSRGAGKNRAGLEPLGRPPSPADKDGKPGRTGDLGALQSLCTTPTTEAVYCFVYND 843
Qy 1415 ---VATVKEAGRSIHEIPREELRHTPE-----LPLAPRPLK--EGSITQGT 1455
Db 844 SDEPPAAAPTTHRTSALPRAFTRFPQGRKEAPAPSKAAPAAPPAKTPQSLIADET 903
Qy 1456 PLKYDTCASTGSKKHVRSLSIGSPGTTPP-VHP-----LDVMADARA 1498
Db 904 PPCYSLSSSA-----SSLSEPESEPPAVHPRGREPAVTKDPGPGGRDSSPSRA 954
Qy 1499 LE---RACVEES-----LKSRRGTASSSGG----- 1520
Db 955 AEELQRCISSALPRRRPPVSVGLRRRKPRATRLDERPAEGRSRRERGEAASDRASLDVS 1014
Qy 1521 ---SIARGAPVIVP---ELGKPRQSPLTYEDHCAPFAGHLPGRGSPVMTREP---TPRLQE 1571
Db 1015 EWFATIEGANSITWLHQAATAATREASSEDSTLSFVSGLSVGS--TLQPKRKHGROAE 1072
Qy 1572 GSLSSSKASQDR-----KLTSTPREIA--KSPHST-----VPEHHPHIPISYEHLLRGV 1618
Db 1073 GEMGARRRPEKRAASVKTSGSPSPAGPEKPGTKTTPGVDA-----VLGR 1121
Qy 1619 SGVDLVRSHIPLAFDTSIPRGIPLDAAAAYILPRHLAPNPTYPHLYPPYLIRGYPTAA 1678
Db 1122 T-----VTVFSPAPRAQPKGTPGPRATPRKVAP----- 1150
Qy 1679 LENRQTIINDYITSQQMHNTATAMQADMLGLSP-RESSIALNYAAGPRGIIDLSQV 1737
Db 1151 -----PCLAQPAAPAKVPSPGQORSLSLRPAKTSSELATLSQ- 1187

PRIOR FILING DATE: 2002-05-16
PRIOR APPLICATION NUMBER: 60/311,292
PRIOR FILING DATE: 2001-08-09
PRIOR APPLICATION NUMBER: 60/311,979
PRIOR FILING DATE: 2001-08-13
Remaining prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 369
SOFTWARE: CuraseqList version 0.1
SEQ ID NO 36
LENGTH: 3252
TYPE: PRT
ORGANISM: Homo sapiens
US-10-210-130-36

Query Match 2.9%; Score 386; DB 15; Length 3252;
Best Local Similarity 19.0%; Pred No. 5.8e-09;
Matches 478; Conservative 309; Mismatches 873; Indels 860; Gaps 119;

78 RSQELHLPESHSLPE---LGKSEMEFTESKRPRLELLPDPRLRPSPILLATQCPAGSSED 134
Db RSLDMAIDPDSLTYVQHVGILGSDQWLTALVTG-----LRPGWAAATGLRKGVOH 1340
QY 135 LTKDRSLTGKLEVPSPSP-----HTDPELELVPPRLSKEELIONMDRVDREITWVE 187
Db 1341 IFRVLSTTVKSS--SKPSPSEPVQLLEHGPTLEZAPAMLDKPDIVY-----VVE 1388
QY 188 QOISKLKQKQQLLEAAKPEPEKPVSPPIESKHSRLVQIYDENRKKAAEAHRILEG 247
Db 1389 GQ-----PAS-----VTTF--NHVEAQVWVRSRG 1412
QY 248 LGQVELPLY--NQPSTROYHENIKINQAMRKL--ILYFKRNHARKQKQFCQRYD 303
Db 1413 ALLEARAGVYELSQDD--QY--CLRICRVRRDMGALICTARNHGTQ-----CSVTL 1464
QY 304 QLMEA--LEKQVERIENPFRRAKESKRYEYKQFPEIR-----KQ 343
Db 1465 ELAEAPRFESIMEDVEGAGETARFAVVE--GKPLDINMYKDEVLLTESHSVSVFVEE 1522
QY 344 RELQERMQRVQGRGSLGMSAARSEHVS---EI-----IDGLSEQENLEKOMR 390
Db 1523 NECSLVLTSGADGGVYICTAQLAGVSCAEALAVHAQAQAMEVGVGEDE--DHRGR 1580
QY 391 QLAIVPMPLYDADQ--RIKFINMGLMADPMKYKDRQVMNWSQEKETPREKFM--- 445
Db 1581 RLS---DPYDIHQEIGRGAFSYL-----RRIVERSGLE--FAAKFIPSQ 1620
QY 446 QHPKFNGLTASFLERTVAECULYLYLTKNENYKSLVRSYRRRGSQOQQOQQOQQO 505
Db 1621 AKPKASARREARLLARLQHDCLVYFH-----EAFE-----RRRGLVIVTELCTELLE 1668
QY 506 QOQQQPMRSPSSQEKDEKE-----KEKEAEKEBEKEVENDEKDLLEKTDGSD 557
Db 1669 RIARKTVCESERAYMRQVLEGIHVHSHVHLVDPK-----ENLL--VWDGAAGE- 1719
QY 558 NDEKEAVASGRKTANSQGRKR-----ITRSMANEA--NSEEAITPQOASAE 604
Db 1720 --QOVRICDPG---NAQELTPEQPCQYGTPEFVAPAEIVNQSPVSGVTDIWPVGWAF 1773
QY 605 ASNELNESSRTEEMETAKGELLEGRNWSATARMVGSKTVSQCKNFYNYKKRNLDE 664
Db 1774 LLSDRNLPCVGNND-----RTTLMNIRYNVAFEETTLFSLSR-----EARGFLIK 1819
QY 665 ILQCHKLKMEKERN-----ARRKKKKAPAAASEEAAPPPV 700
Db 1820 VLVDRLRPTAETLESHPFKTOAKAEVSTDLKLFLLRRRQWRSQISYKCHLVLRPI 1879
QY 701 E-----DEMEAGVSGNEEMVEEAALHAGSNEVPR---GECSP--AT 741
Db 1880 ELLRAPPERVWVMPRRPPPSGGLSSSDSEEBEELPS---VPRLPQEPFGSRVSL 1935
QY 742 VNNSSDTESTIPSPHTEAKDQNGKPPATLGADGPPGPTFPPTTSPATPEPTPASE 801
Db 1936 TDIPTDEALGTDETGA-----TPMDWQEQGRAP-----SQ 1967

QY 802 ATGAPTPPPAPSPSPAPPVVPVKEEKEETAAPVVEEGEOKPPAAEBELAVDTGKAE-- 859
Db 1968 DQEAES-PEALSPG-----QEPAGASPRGELRRGSAESALPRAGRELG 2014
QY 860 -----EPVSECTEAEAGP-----AKGDAEAAEATAEGALKAEKKEGG--SGRATTAKS 908
Db 2015 RGLHKAASVELPQRSPGPGCATRLARGGLGEYEAQRLQALQRLRLRGPGEDGKVSGLRG 2074
QY 909 -----SGAPQSDSSATCSADEVDEAGDGNRLISPRPSLLTPTGDDRA-NASQKPL 961
Db 2075 PILLESLGGRRDPRMARAAASSEAAHPHPPLENRGLQKSSFSQGEAEPGRHRRAGAPL 2134
QY 962 DLKQLK---QRAAAIPIQVTKVHEPPREDAAFTPPAPPAPPPPPQNLQPE----SDAQO 1014
Db 2135 EIPVARLGGARRLQESPLSALSEAQP-----SPAPSPAPKPTPKSAESATTPSDAPQ 2190
QY 1015 PGSSPRGSRSPAPPADKEAFAAAQKLPDPPCWTSGLPFPVPPR-----EVIKASPHAP 1070
Db 2191 PAPQP-AQDKAPEPRPE---PVRASK-PAPPFQALQTLALPLTPVAQIIQSLQLSHAQ 2244
QY 1071 DPSAFYAPPGHPLPLGLHDT--ARPVLPRP-----PTISNPPPLISSAKHPSVLERQ 1121
Db 2245 GFSQGPAAAPPSEKPP---HAAVFAVSPPPGAPEKRVESAGGPPVLAEBKARVPTVPPRP 2301
QY 1122 IGAIQGM-SVOLHVY-SEHAKAPVGPVTMGLPL--PMDPKLAPFSGVKOBQLSPRG 1177
Db 2302 GSSLASSIENLSEAVFEAKFRRSRESPLSLGLRLLRSRSEERGPFRAEED----- 2355
QY 1178 AGPPESLGVPTAQEASVLRGTALGSLVPGGSIITKGIPTSTRVPSDSAITYRGSITHGTPADV 1237
Db 2356 -----GIYRSPA---GTPLELVRRPERSRQDLRAVGEPLVRLSL----- 2396
QY 1238 LYKGTITRIIGEDSRDLRGREDSLPKGHVIYEGKGVHVSYEGGMSVTQCKEDGRSS 1297
Db 2397 -----SLSORLRTTPAQRHPAWEARGDGSESEG-----GSSA 2430
QY 1298 SGPPHETAAPK---TYDMEGRVGRAISSASIEGLMGRAIPPERHSPHILKEQHHRG 1353
Db 2431 RGSP-VLAMRRRLSFTLERLSRLQSGSDSGAGSRSTPLFORLRATSEGESLR- 2487
QY 1354 SITQIGIPSYVAQEDYLREAKLKRGT-----PPPPPSRD-----ITEAYKQALGP 1404
Db 2488 --RLGLPHNQLAAQAGATTPSAESLGEASATSGSAPGESRSLRWGFSRPRKDKGLSP 2545
QY 1405 LKLKAHEGLVATVKEAGRSIHEIPREELRHTPELPLAPRLKEGSIITOGTPLKYDTGAS 1464
Db 2546 PNLS-----ASVQBELG---HOYVRSEDFPPVFI---KLKQVLLLEG----- 2583
QY 1465 TTGSKKHQVRSIGSPGRTFPVPHPLDVNMADARALERACYEBSLSKSRPG---TASSSGGS 1521
Db 2584 -----EAATLLCLPAAC--PAPHISWMD-----KSLRSEPSVIVVCKDGRQ 2625
QY 1522 IARGAPVIVPELGKRPQSPITYEDHGAPAGHLPGSPVPTMREPTPRLOEGLSSSKASQ 1581
Db 2626 L-----LSIPRACK-RHAGL-YECATNVLGSISSCTVA----- 2658
QY 1582 DRKLSTPREIAKSPHSTVPEHHPHPISPYEHLLRGVSGVDLYRSHIPLAFDPTSI PRGI 1641
Db 2659 -----VARVPGKLA-----PEVPTQDTALVLWK 2684
QY 1642 PLDAAAAAYLPHRLAPNTYPHYLPYIRGYPDTAALENQTIINDYITTSQOMHNTAT 1701
Db 2685 PGDSRA-----PCYVTLERR-----VDGESVWHPVSS 2711
QY 1702 AMAQRADMLRGLSPRESSIALNVAAGPGRIID-LSQVPHPLVLPVPTPTGTPATMDRLAY 1760
Db 2712 -----GIPDCYNNVTHLPVGV-----TVRFVAC 2735
QY 1761 LPTAQO-PFSSRRSSSPLSPGGPHTLTKPTTTSSSERERDRDRDREREKSIILTSIT 1819
Db 2736 ANRACQGPFS-----NSSEK----- 2750

Db 8516 SHRFTSVLARTATKTSHPAGWRMRKSTPTSDQAPIPTL-----LCKGRSKTFSGST 8571
QY 1588 TPREIAKSPHSTVP-EHHPHPIISPYEHLHGVSGVDLYRSHIPLADPTSIPIRGIPLDAA 1646
Db 8572 VRLELTWSTFSAIPVSISSRIAKPGCMKG-SPPAKYSRMRWAFS-----RSVAHSS 8625
QY 1647 AAYV-----LPRHAPNPTPHLYPPYLLIRGYPDTALENRQTIINDYITSQOMHNN 1698
Db 8626 SSRYGSITADDFGRFLAPOE-----LTGAHITHR 8656
QY 1699 TATAMAQRADMLRGLSPRESSLAINVAAGRGIIDLSQVPHLPVLVPP-----T 1747
Db 8657 RLQVLPNMRKKGNSNPSGAVRSGAKSTVSANRSLMLCRDVAPRSSRQSHADTRS 8716
QY 1748 PGTPTATAMDLAVLPTAPQFSSRHSSPLSPG-----PHLTKPTTSSSER- 1796
Db 8717 PASIASKRVRMLGLLNA-----SVSLPTSSGLSCARELGAOPTASALSLSLTKGSADS 8768
QY 1797 -----ERDRDRDREREKSIILTSTTV-----EHAPIW----- 1827
Db 8769 YSSLWIESSTQRPSPSEAHRIWCHSTHVGWGLGGWVLSRPSASPAPAAACWRAGCP 8828
QY 1828 -----RPG-----TQSGSGSSGGGGSSSRP-----ASH 1854
Db 8829 GRTARPGRRGLGRRRPGRGRRRGAAGRPGGSAARPDPRPASRAPGRGSAAGAA 8888
QY 1855 SHAHQSPISPRQDALQORPSVLNWTGMKIITAVEPSKPTVLRSTSSSPVPAATPP 1914
Db 8889 DRAVRAPFGFRTPA---RPG-----PRVRRSSSATGPARRA---P 8924
QY 1915 PATHCPLGGTLDGVYTLMPVLLPKEAPRVARPERPRADTG-----HAFIA 1961
Db 8925 PRRH-----AWTAPACRP-----AAAGAPRADAGPGSRVPGPWRAHRTS 8967
QY 1962 KPARGSL-EPASSPSKG-----SERPLVPVSVGHATTIARTPAKNA----- 2003
Db 8968 RPAGRTARPRAPDRPSPGRRRASRSPAGRRGAGRG-ARCPLRASASAPTERRAARPA 9026
QY 2004 -----PHIASDPPAPPASADPHREKTSQKPFQIQLSLGLVHGSYSPEGV 2053
Db 9027 RCGRADRRPSPRGADRSAPGARRPPGR--WARRPGAPAGRAPAAAGSAGSGP--- 9081
QY 2054 EPVSPVSSPLTHDKG-LPKHLEELDKSHLEGLRKPQ--GPVKLGGEAAHLPHLRPL 2109
Db 9082 PVLVLYREFQ-AGDRELVEPV-LLHRAVLEGLLVPLVLCRGL-LQARAQHL----- 9132
QY 2110 PESQSSSPLLQTAGVKHQHV-----VTLAQH-----ISEVITQDY 2147
Db 9133 -----LLE--PHVLGHVRAELTLHLAGPVLVVDPPALLAHHRRGAVQCQDVVQGV 9181
QY 2148 TR-HHPQOLSAPLPAFLYSPGAS-----CPVLDLRRPPSDLYLPPPDHGAPARGSPH 2199
Db 9182 ARPHHG--DGPGRVPLGGVEPVGGGLDVLVPLVWGLRQDPTVWL-----GRVVEVDH 9234
QY 2200 SEGGRSPE-----PNKTSVLGGED-----GIEPVSPPEGM-----TE 2233
Db 9235 VDATAGDGDGIGVHLAVTVPGQPGARGGLEHHAHVPGDVEVRPQGLHGAQQQMARQ 9294
QY 2234 PGHRSAYVPLLYRDGEQTEPSRMGSKSP----- 2262
Db 9295 PGHHRGLVHDVL--DADRGRVGLVGLQRPDGVVHGPAGVWQDAGRLLHRLHFOFGAQ 9352
QY 2263 ---GNTSQPAFSPKLTE-----SNSAMVK 2284
Db 9353 AAHGQHTLPPEGGDLVLEQAGLFDMAFGDREGEGGSCIGHVECTSPGERADRGPSRA 9412
QY 2285 SKQKQINKLNTNHRNPEYNIQPGTEIFNMPAITGTGLMTYRSQAVQSHASTNMGLEA 2344
Db 9413 TKYHCVRSSAARAARSPGSAAGQPG-RVYSVP-----RSSTSSAHRSSLVVPSR 9461
QY 2345 IIRKALMGKYQWEEPSPLS-----ANAFNPLNASLSLPAAMPITADGRSHHTLT 2395

Db 9462 I-----AW--SPPCSKTTTGDCRRSSGAAPRAPTPSPSTSTLSTRSTRASSGT-T 9508
QY 2396 SPGGGKAKVSGRPSRKA-----KSPAGGLASGDRPVSVSVHSEGDGNNRRTPLTNRVME 2451
Db 9509 SRRVTSTAISRVSARSYGRRRRLPGLETTWTWLSRPGVAAAACHTVTSKSR--- 9565
QY 2452 DRPSSA-----GSTPPFPYNPLIMRLQAGVMASPPPGPLPAGSGPLAG 2493
Db 9566 -RSCSAYCGSGSTA-KCRPRGAARRMCRVRISSPPP--APMSROPESG 9607
RESULT 73
US-10-084-846A-4
; Sequence 4, Application US/10084846A
; Publication No. US20040006026A1
; GENERAL INFORMATION:
; APPLICANT: WEITNAUER, GABRIELE
; APPLICANT: MUHLNBERG, AGNES
; APPLICANT: TREFFER, AXEL
; APPLICANT: BECHTHOLD, ANDREAS
; TITLE OF INVENTION: AVILAMYCIN DERIVATIVES
; FILE REFERENCE: 1974-005
; CURRENT APPLICATION NUMBER: US/10/084,846A
; CURRENT FILING DATE: 2003-02-25
; PRIOR APPLICATION NUMBER: PCT/EP01/09815
; PRIOR FILING DATE: 2001-08-24
; PRIOR APPLICATION NUMBER: DE 101 09 166.4
; PRIOR FILING DATE: 2001-02-25
; NUMBER OF SEQ ID NOS: 120
; SOFTWARE: Patent In Ver. 3.2
; SEQ ID NO 4
; LENGTH: 19725
; TYPE: PRT
; ORGANISM: Streptomyces viridochromogenes
; FEATURE:
; OTHER INFORMATION: Protein 2: amino acid sequence encoded by coding strand 1.
; OTHER INFORMATION: Start codon: gat, Start position: nucleotide 2.
US-10-084-846A-4
Query Match 2.9%; Score 381.5; DB 15; Length 19725;
Best Local Similarity 20.8%; Pred. No. 7.9e-08;
Matches 456; Conservative 839; Mismatches 88; Indels 747; Gaps 106;
QY 698 PVVDEMEASGVSGNEEWEVEAEALHASGNEVPRGECGPATVNNSSDT----- 748
Db 2119 PILDRVADGAVVGGDTAQAVRNLSCAG---PWETSRPVRSARPTDTAGPRITQDV 2174
QY 749 --ESIPSPHTEAAKDTGQNGPKPPATLGDGP--PPGPPTPPRRTSRAPTEPTPASEATGA 805
Db 2175 FFSARPAPEDA--GSARPSAKARRPGPHSLPLHPHRRRQSGIPPANEDSLRA 2229
QY 806 PTPPPAPPSPSAPPVVPVKEEKEEETAAAPPVEEGEQEPAAEELAVDTG----- 856
Db 2230 PGLPPFRP-----PKDTPVATTGA---VSLGRNMGNTGENTGNTGDKIQGPLL 2277
QY 857 -----KAEPEVK-SECTEEAEAGPAKGDAAEATAEGALKAEKKGSGSRATTAKS 908
Db 2278 RGLPPARRLPGVVRPGCRSSAAGPLR-----EPGSGYCGRRSRPHARAAPTRA 2328
QY 909 SGAPODSATSACSADEVDEAGGDKNRLLSRPPS---LLTPTGDPANASPOKPLDLKQ 965
Db 2329 SAAGPATGCAGTCPSQCVRSRTAG-----RPARHARTRRGRRTAHADRRP---R 2376
QY 966 LKORAAIPIQVTKVHEPPREDAAPTKPAPAPPQ-----NLQESDAPQ 1013
Db 2377 CGWRTAA-----HRPP-PSGAFAAGRPAPRPPDRACRNARSAAHVAARARARPA 2426
QY 1014 QPC--SSP-----RGKSRSPAPPADKEAFAAQAQLPGDPPCWTSGLPFPVPPREVIKAS 1066
Db 2427 RAGRSSPPAPACRGPHRRRSAPAAAGAAAPAPS--CGNRCESTG-PTASPDPR---R 2479
QY 1067 PHADPSASYSAP-----FGHPLPLGLHDTARP-----VLPRPTTINPPPLISSAKHPSV 1117

Db 1297 WYISKPKQKXRVWYGESWTDGQFEYG-----GEGSDPADVAIQLT-----FURLMS 1344
Qy 2288 QEINKKLNTNHRNEPEYNISQPG 2310
Db 1345 TEASONITYHCKNSVAYMDQQTG 1367

RESULT 90
US-10-342-331-5
; Sequence 5, Application US/10342331
; Publication No. US20030229205A1
; GENERAL INFORMATION:
; APPLICANT: VAN HEERDE, GEORGE V.
; APPLICANT: VAN RIJN, ALEXIS C.
; APPLICANT: BOUMSTRA, JAN B.
; APPLICANT: DE WOLF, FREDERIK A.
; APPLICANT: MOOBROEK, ANDREAS
; APPLICANT: WERTEN, MARC W.T.
; APPLICANT: WIND, RICHELLE D.
; APPLICANT: VAN DEN BOSCH, TANJA J.
; TITLE OF INVENTION: SILVER HALIDE EMULSIONS WITH RECOMBINANT COLLAGEN
; TITLE OF INVENTION: SUITABLE FOR PHOTOGRAPHIC APPLICATION AND ALSO THE
; FILE REFERENCE: 2728-2
; CURRENT APPLICATION NUMBER: US/10/342,331
; CURRENT FILING DATE: 2003-01-15
; PRIOR APPLICATION NUMBER: US/09/219,849
; FILING DATE: 1998-12-23
; NUMBER OF SEQ ID NOS: 50
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO 5
; LENGTH: 960
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Illustrative
; OTHER INFORMATION: amino acid sequence
US-10-342-331-5

Query Match 2.88; Score 365; DB 15; Length 960;
Best Local Similarity 21.38; Pred. No. 1.3e-08;
Matches 337; Conservative 33; Mismatches 490; Indels 720; Gaps 78;

Qy 726 ASGNEVPRGSCGATVNNSSD--TESIPSPHTAAKXDTQNGPKPPATLGADGPP-----779
Db 11 AHGAPGKG-APGAPGPGSRDPCPCAPG-----AGPGSRDPGPPGAPGAPGPGSRD 65
Qy 780 PGPP-----TPPRTSRAPIETPASE-----ATGATP--PPA-----PPSPSAPP 820
Db 66 PGPPGAPGAPGPGSRDPGPPGAPGAPGPGSRDPGPPGAPGAPGPGSRDPGPPGAPG 125
Qy 821 VPKKEEKEETAAPVEEGEQPRAAEELAVDTGKAEEFVKSECTEEAEERPAKGD 880
Db 126 AGPPGSRDPPGAP-----GPAGPGSRDPPGAP-----GPAGPGSRD 168
Qy 881 EAAEATAEGALKAEKKEGSGRATTAKSGAPQDSDSATCSADEVDEAEGGKNNLLSP 940
Db 169 GPAGAPGAPGPGSRDPPGAPGAPGPGSRDPPGAPGAPGAPGPGSRDPPG-----221
Qy 941 RPSLLTTPGDRANASQKPLDLKQLKORAAAIPPIQVTKVHPFPFREDAA-----T 992
Db 222 -PGAHPGAG-PKAHPGAGP-----KGAHPGAPGKAHPGAPGAPGAPGAPGAPG 270
Qy 993 KPAPPAPPQNLOPESDAPQPGS-SPRGK--SRSPAPPADKEAFAAEAQKLPGPDP 1049
Db 271 DPQPPGAPGAPG-PPGSRDPPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPG 326
Qy 1050 TSGLPFPVPREVIVKASPHADPSAFYAPPGHPLPLGLHDTARVLPVLPRTTISNPP 1109
Db 327 --GAPGAPG-----PGSRD-----GPPGAPGAPGPGSRDPPGAPGAPGAP 369
Qy 1110 SSAKHPVLRQIGAISQGMVQLHVPYSEHAKAPVGVMTGLFLPMDPKKLPFGVQK 1169

Db 370 -----GSRDPG-----PPGAPGAPG-----PGSRDP-----391
Qy 1170 EQLSPRGQAGPPESLGVPTAQEASVLRGTALGVPGGSIITKIPSTRVPSDSAITYRGS 1229
Db 392 -----GPPGAPGAPGPGSRDP-----GPPGAPGAPGPGSRDPGPP-----428
Qy 1230 THGTADVLKGTITRIIGEDSPSLDRGREDSLPKGHVIYEGKGHVLSYEGGMSVTC 1289
Db 429 --GAP-----GPAGPP-----GSRDPGPPG-----APGAPG-----452
Qy 1290 SKEDGRSSGPP--HETAAPKRTYDMMGRVGRRAISSASIEGLMGRAIIPERHSPHLKE 1347
Db 453 --PPGSRDPGPPGAPGAPGPK-----GAHPGAPGKAHPGAPGAPG 490
Qy 1348 QHHIRGSIQTGIPRSYVEAQEDYLRREKLLKREGTPPP--PPPSRDLTEAYTQALGPL 1405
Db 491 AHGAPG-----KGAPGAPGAPGSRD-----511
Qy 1406 KLKPAHEGLVATVKEAGRSIHEIPREELRHTPELPLAPRLKEGSIQTGTPLKVDTCAS 1465
Db 512 -----PGPGAPG-----AGPPGSRDPPG-----532
Qy 1466 TGSKKHVRSLGSPGRTPPVHPVLDVMADARALERACYEESLKSREGTSSSGSARG 1525
Db 533 -----GAPGAPG-----GSRDPG 547
Qy 1526 APVIVPELGKPROSPLTYEDHGAPFAGHLPGRGSPVTWREPTPLRQESLSSKASQDKL 1585
Db 548 PPGAPGAPGPPG-----RDPGPPGAPG-PAGPPGSRDPPGAPGAPGAPGAPG 596
Qy 1586 TSTPREIAKSPHSTVPEHHHPHISPVEHLLRGVGVLDYRSHIPLAPDPTSIIRGIP 1645
Db 597 -----PGPPGAPGAPG-----PGSRDPG--PPG-----618
Qy 1646 AAAYILPRHLAPNTYPLHYPPYLIIRGYDPTALENRQTIINDYIISQMHNTATAMAQ 1705
Db 619 -----APG-----622
Qy 1706 RADMLRGLSPRESSLALNVAAGPRGIIDLSQVPHLPVLVPTPTGTPATA--MDRLAYLP 1762
Db 623 -----AGPPGSRD-----PGPGAPGAPGAPGAPGAPGAPG 651
Qy 1763 TAPQPFSSRRHSSPLSPGPFTHLTKTPTTSSSRERDRDRDREREKSIITSTTIVE 1822
Db 652 GAPGAPGPGSRDPGPPGAP-----671
Qy 1823 HAFIWRPCTEQSSGSSGSSGSSGSSR-----PASHSHA---HQHSPISPTQDALQORP 1875
Db 672 -GPAGPPGSRDPPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPG 720
Qy 1876 SVLHNTGMKGIITAVEPSKPTVLRSTSSPVPRPAATFPDPATHCPLGGTLDGVVPTLMEP 1935
Db 721 -----GAPG-----PAG--PKGAHPGAP-----736
Qy 1936 VLLPKEAPRVARPERPADTGHAFLAKPPARSGLPSPASSKSGSE-----PRPLVPPV 1988
Db 737 ---PKGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPG 782
Qy 1989 SGHATTARTPAKNLAPHHASP-----DP-----PAPPASADPHREKTOSKPFIOELE 2037
Db 783 S-----RDPGPPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPG 820
Qy 2038 LRSILGVHSSYSYEGVE-PVSPVSSPSLTHDKGLPKHLELDKSHLEGLRKPQGPVKL 2096
Db 821 -----GPPGAPGAPGAPG-----RDPG-----PPGAPGAPG 848
Qy 2097 GGEAAHLPHLRPLPESQPS--SELLQTPAGVKGHQVRVTLAQHISEVITQDTRHHPOQL 2155
Db 849 PGSRDPPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPGAPG 885
Qy 2156 SAPLPAPLYSFPGASCPVLDLRPPSDLYLPPDPHGAARGSPHSGGKSPSPNKTSLV 2215

Db 886 RDGP-----PGAPGPA-----GPPGSRDPGP--GAPGAPG--PGSRDPGP----- 924

QY 2216 GGGEDGIEPVSPRGMTERG 2235
Db 925 -PGAPG--PAGPP-GSRDPG 940

RESULT 91
US-10-664-859-15
; Sequence 15, Application US/10664859
; Publication No. US20040038901A1
; GENERAL INFORMATION:
; APPLICANT: BASLER, Konrad
; APPLICANT: BRUNNER, Erich
; APPLICANT: FROESCH, Barbara
; APPLICANT: KRAMES, Thomas
; APPLICANT: PETER, Oliver
; TITLE OF INVENTION: ESSENTIAL DOWNSTREAM COMPONENT OF THE WINGLESS SIGNALING PATHWAY
; TITLE OF INVENTION: THERAPEUTIC AND DIAGNOSTIC APPLICATIONS BASED THEREON
; FILE REFERENCE: 060361
; CURRENT APPLICATION NUMBER: US/10/664,859
; CURRENT FILING DATE: 2003-09-22
; PRIOR APPLICATION NUMBER: US/09/915,543
; PRIOR FILING DATE: 2001-07-27
; PRIOR APPLICATION NUMBER: 60/221,502
; PRIOR FILING DATE: 2000-07-28
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 15
; LENGTH: 1426
; TYPE: PRT
; ORGANISM: Human lgs/bcl19
US-10-664-859-15

Query Match 2.8%; Score 364; DB 12; Length 1426;
Best Local Similarity 19.7%; Pred. No. 2.2e-08;
Matches 377; Conservative 197; Mismatches 685; Indels 658; Gaps 98;

QY 724 LHASGNEVPRGCSGATVNNSSDTSIPSPHTEAAKDTGQNGKPKPATILGADGPPGPP 783
Db 1 MHSNPKVR-----SSP-----SGNTOSSPKSKEVM-----VRPPTVMS-----PSGNP 40

QY 784 TPRRTSR-----APIEPTPASEATGATPTPPAPPSPSAPPVVPVKEEKEETAAP 835
Db 41 QLDKFSNQKQSGASQSPSCDSKSGHT--PKALPGP----- 80

QY 836 FVEEGEQKPPAAEELAVDTGKAEEPVKSECTEEAEAGKAKGDAEAAEAEGALKAEK 895
Db 81 ----GSMGLKNGAGNAGKAGKREKRSISADSFQDPG--TPNDDSDIKECNSADHIKSQD 135

QY 896 KEGSGGRAT-----TAKSSGAPQSDSSATCSADEVEAEAGDKNRLLSPRPSLLTPT--- 948
Db 136 SQHTPSMTSPSNATAPRSSTPSHGQTAT-----EPTPAQKTPAKV 177

QY 949 ---GDPRANASPOKPL-----DLKQK--ORAAAIPIPIOVTKVHEPPREDAAP 991
Db 178 YVESTEWANKAAEAVLKGVETIVSHI QNISNKTERTAPLNTQISALRNDP----- 231

QY 992 TKPAPPAPPPQNLQPESD-----APQQGSSPRGKRSRSPAPPADKEAFAAEAQKLP--G 1044
Db 232 -KPLPQPPAPANQDQNSQNTRLQTPPIPAAPKPAAPRPLDRSPGVENKLIPIVSG 290

QY 1045 DPCWTSGLFPFVPP-----REVIKASPHAPDPSAFYAPGHPPLPLGLHDTAR 1093
Db 291 SPASST-----PLFPDGTGNSTNNRAVTPVQGSNSSADPKAPPPPPVSSG----- 339

QY 1094 PVLPRPTTISNPPLISSAKHPSVLRQIGAIQSGMSVOLHVPSYSEHAKAPVGVMTGLP 1153
Db 340 ----EPTLGENPDGLSQEQ-----LEHRESLQTLRDIQ-----RMLFP 375

QY 1154 LPMDPKKLAPFSGVKQEQSLSPRQAGPPESLGV---PTAQ-----BASVLRTGALGSVPG 1205
Db 376 ---DEKE---FTGAQ-----SGGPQNPVGLDGPQKKPEGPIQAMMAQSLSQKGGPG 421

QY 1206 GSITKGI-----PSTRVP-----S\$SAITYRGSITHGTGTPADVLYKGTITRIIG 1248
Db 422 PRTDVGAPGPGQHRDVPFSPDEWVPFPMNSQSGTIGPDHDMTPEQIAW----- 472

QY 1249 EDSPSRLDRGREDSLPKGHVIYEGKKGHVLSYEGGMSVTVQCSKEDGR--SSSGPHTAAP 1307
Db 473 -----LKLQEQEYEEKR-----RKQEQVVVQCSLQDMVMVHQHGRGVVRGP 514

QY 1308 KRTYDM--MEGRVGRAISSASIEGL-MGRAIPPERHSPHILKEQHIIHRSITQCI PRSYV 1364
Db 515 PPPYQWTPSEGWAPGCTEPFS-DGINMPSLPPRGWAPH----- 552

QY 1365 EAQEDYLREAKLLKREGTPPPPPSRDLUTEAYKTQALGPLKLKPAHEGLVATVKEAGRS 1424
Db 553 -----PNMPGSG-----MRL--PGFAGMIINSEMEG--- 575

QY 1425 IHEIPREELRHTPELPLAPRLKEGSIQTGTLKYDTGASTTTSKXKHVRSLSIGSPGR-- 1482
Db 576 -----PNVENPASRPGLS--GVSWPDDVPKIPDGRNFPFGGIFSGPGRGE 619

QY 1483 TTPPVHPLDMADARALERACYEESLKR-----PGTASSSGSIARGAPVIVPELGKPR 1537
Db 620 RFP-----NPQGLSEMFQQLAEKQLGLPPGMAMEG-----INPSMEMNR 660

QY 1538 QSPLTYEDHGAPFAGHL--PRGSPVTWREPTPRLQEGSLSSSKASQDRKLTSTPREIAKSP 1596
Db 661 MIPGSOR-----HMEFGNPIFPRIPV-----EGPLSPSRGD----- 692

QY 1597 HSTVPEHHPHPISPYEHLLRGV--SGVDLYRSHIPLAFDPTSIPRGIP--LDAAYYL 1651
Db 693 ---FPKGI PPQMGPGRELEFGMVPSCM---KGDVNLNVNMGNSQMI PQOWREAGAG--- 743

QY 1652 PHLAPNPTYPHLYPIRGYPDTAALENQTIINDYITSQQMHNHTATAMAQRADMLR 1711
Db 744 -----PEMLKLRPG-----SDMLPAQO-----KMVPLPF 769

QY 1712 GLSPRESSLALNVAAGPRGIDLSQVP-----HLPLVLPVPTPGTPATAMDLAVLPTAPQ 1767
Db 770 GEHPQO-----EYMGPRFLEWSPQGSNGSLNLRNREFI-GPDQRTNRLSHMPLPLN 823

QY 1768 FFSRHSSSPLSPGPGTHLTKPTTTSSSRERDRDRDREREKSILTSTTTTVEHAPIW 1827
Db 824 PSSNPTSLNAP-----PVQRLGRKPLD-----ISVAGSQVH 856

QY 1828 RPTGTEOSSSGSSSGGGSSSRSPASHAHQ--HSPI--SPRTQDALQORPSVHNTGM-- 1883
Db 857 SPGI-----NPLKSPTHQVQSPMLGSPSGLNLSKSPQTPSQO---AGML 896

QY 1884 KGIITAVEPSKPTVLRSTSTSSPVRPAATFPATHCPLGTLGDVYPTLMEPVLLPK--EA 1942
Db 897 AGPAAASTKSPVVLGSAAS-----PVHLKSPSLPAPSPGWTSSPKPPQSPGIPNNHKA 952

QY 1943 P-RVARPERPRADTGHAFIAPKPARSGLEFPASSPSKSGEPRLVPPVSGHATARTP--- 1998
Db 953 PLTMASFP-----AMLGNVESGGPPPTASQASVNI PGLSPSSFTPTMPPEPTLSQNLPSI 1008

QY 1999 -----AKNLAP-----HH-----ASPDPPAPASASDPHREKTQSKPFSIQEILERSLG 2042
Db 1009 MMSRMKSFAMPSTPLYHDAIKTVASSDDSDSPARS--PNLPSMNNMP-----GMG 1057

QY 2043 YHGSSYSYSGVPSVSPSLTHDKGLPKHLELDKSHLEGLRKPQGPVVLKGGAH 2102
Db 1058 INTQNPRISGPNPVDM--PTLS--PMGMTQPL-----SHSN-----QMSPNVAVG----- 1099

QY 2103 LPHLRPLPESQSSSSPLLQTAFCVKGHORVVTLAQHI SEVITODYTRHHPPQQLASLPAP 2162
Db 1100 -----PNI PHGVDM---GPGMLSHNPIM-----CHGSQBPPVMPQG 1133

QY 2163 LYSFPACACFVLDRRLPPSDLYLPDPDHGAPARGSPHSEGG-----KRPEPN 2210
Db 1134 RMGFPOGFPFV---QSPPOQVFPF---HNGPSGGQGSFFPGMGFPGEGLGRPSNLPQSS 1187

QY 2043 YHGSYPGVEPVSPVSPSLTHDKGLPKHLELDKSHLEGELRPKQPGVPLKGGEEAH 2102
Db 1058 INTQNPRISSGNPVVPM--FTLS--PMGWTQPL-----SHSN-----QMPSPNAV----- 1099
QY 2103 LPHLRPLPESQPSPLLOTAPGVKGHORVVTLAQHISEVITQDYTHHPQOQLSAPLPAP 2162
Db 1100 -----PNIPPHGVPM---GPGMLSHNPIM-----GHGSQBPPMVPPQG 1133
QY 2163 LYSPFGASCVPDLRRPPSDLYLPPDPHGAPARGSPHSEGG-----KRSPPEPN 2210
Db 1134 RMGFPQGPVPV---QSPFQVPPF---HNGPSGGQFPFGMGFPBGGLGRPSNLPQSS 1187
QY 2211 KTSVL---GGGEGDIEPVSPPEGMTEPGHRSASVYLLYRDGEQTEPSRMGSKSPGNTSQP 2268
Db 1188 ADAALCKPGGPGG-----PDSFTVLGNSMPSVF-----TDPDLQVIRPGATGIP 1232
QY 2269 PAFESKLTESANSAMVSKQIEINKLTHNRNPEYNISOPGTEIFNMPAITGTGLMTYR 2328
Db 1233 EFDLSRIIPSEK---PSQTLQYFPRGEVPGKQFO---GPGFGFSHMGMGM----- 1278
QY 2329 SQAVQEHASTNMGLEAIRKALMGKYDOWEESPPLSANAFNPLNASLPAAMPIT--- 2384
Db 1279 -----EQAPRMGL-----ALPGM-----GGGPGVGTDPILGTAPSMGCHNMPPPAF 1321
QY 2385 AADGR---SDHTLSPGGGKAKYSGRPSSRKAKSPAPGLASG-DRPPSVSSVHSEGDGCMR 2441
Db 1322 LQQMMGPHRMWSP---AQSTWPGQPTLMSNPAAGVMIPGKDRGPAGLYTH----- 1371
QY 2442 RTPLTNRWEDRPSAGSTFPFYNPLIMRLOAGWAS-----PP---PPGLPAGSG 2489
Db 1372 -----PPVGS-----PGMMMSMQMGFPQQNIMTIPQWRPRGMAADVG 1410

RESULT 93

US-10-322-579-15
; Sequence 15, Application US/10322579
; Publication No. US20030114413A1
; GENERAL INFORMATION:
; APPLICANT: BASLER, Konrad
; APPLICANT: BRUNNER, Erich
; APPLICANT: FROESCH, Barbara
; APPLICANT: KRAMES, Thomas
; APPLICANT: PETER, Oliver
; TITLE OF INVENTION: ESSENTIAL DOWNSTREAM COMPONENT OF THE WINGLESS SIGNALING PATHWAY
; TITLE OF INVENTION: THERAPEUTIC AND DIAGNOSTIC APPLICATIONS BASED THEREON
; FILE REFERENCE: 060361
; CURRENT APPLICATION NUMBER: US/10/322,579
; CURRENT FILING DATE: 2002-12-19
; PRIOR APPLICATION NUMBER: US/09/915,543
; PRIOR FILING DATE: 2001-07-27
; PRIOR APPLICATION NUMBER: 60/221,502
; PRIOR FILING DATE: 2000-07-28
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 15
; LENGTH: 1426
; TYPE: PRT
; ORGANISM: Human lgs/bc19
US-10-322-579-15

Query Match 2.88; Score 364; DB 14; Length 1426;
Best Local Similarity 19.7%; Fred. No. 2.2e-08;
Matches 377; Conservative 197; Mismatches 685; Indels 658; Gaps 98;
QY 724 LHASGNEVPRGEGSPATVNNSSDTSIPSPHTEAAKDTGQNGKPKPATLGDGPPPPGPP 783
Db 1 MHSNPKVR-----SSP-----SGVTQSPKSKQEV-----VRPPTVMS-----PSGNP 40
QY 784 TPRRTSR-----APIEPTPASBATGATPPPPAPPSPAPPVVPVVKKEEETAAP 835
Db 41 QLDSKFSNOGKOGSASQSPSCDSKSGGHT--PKALPGF----- 80
QY 836 PVEEGEQKPPAAEELAVDTGKAEEPVKSECTEAEAGPAKGDAAEAATGALKAEK 895

Db 81 ----GSMGLKNGAGNKAQKGRERSISADSPQDRDPG--TPNDSDSIKCNDSADHIKSQD 135
QY 896 KEGGSGRAT-----TAKSGAPQSDSSATCSADEVDEAEGDKNRLLSRPPSLLTPT--- 948
Db 136 SQHTPHSMTFSPNATAPRSSTPSHGOTTAT-----EPTPAQKTAKVV 177
QY 949 ---GDPRANASQKPL-----DLQOLK--ORAAAIPPIOVTKVHEPPREDAAP 991
Db 178 YVFSTEMANKAAEAVLKGQVETIVSFHIONISNNKTERSTAPLNTQISALRNDP----- 231
QY 992 TKPAPPAPPPQNLQPEDS-----APQPGSSPRGKSRSPAPPADKEAFAAAKQLP--G 1044
Db 232 -KFLPQQPPAPANQDNSSQNTLQPTPIPAAPKPAAPPRPLDRSPGVENKLIPSVG 290
QY 1045 DPPCWTSGLPFPVPP-----REVIKASPHAPDPSAFSAPPHPHPLPLGLHDTAR 1093
Db 291 SPASST-----FLPPDGTGNTNNRAVTPVSGSNSSSADFPKAPPPPVSSG----- 339
QY 1094 PVLPRPTTISNPPPLISSAKHPSVLEROIGAISQGMVOLHVYPVSEHAKAPVGPVTMGLP 1153
Db 340 ----EPTTIGENPDGLSQEQ-----LEHRERSLQTLRDIO-----RMLPP 375
QY 1154 LPMDPKKLAPFGVQKQQLSPRQAGPPESLGV---PTAQ-----EASVLRGTALGSVPG 1205
Db 376 ---DEKE---FTCAQ-----SGGQONPGVLDGPKKPEGPIQAMMAQSQSLKGGPG 421
QY 1206 GSITKGI-----PSTRVP-----SSSAITYRSITHTGTPADVLVYKGTITRIIG 1248
Db 422 PRTDVAGPFGQHRDVPFSPDEMVPFSPMNSQGTIGPDHLDHMTPEQIAW----- 472
QY 1249 EDSPSRLDRGREDSLPKGHVIEGKKGHVLSYEGGMSVTCQCKEDGR--SSSGPPHETAAP 1307
Db 473 -----LKLQOEFYEER-----RKQEVVVQOCSLQDMVMVHQHGRGVVRGP 514
QY 1308 KRTYDM--MEGRVGRAISSASIEGL-MGRAIPPERHSPHHLKEQHHRIGSITQGI PRSYV 1364
Db 515 PPGYQMTPEGWAPGGTEPFS-DGINMPHSLPPRGMAPH----- 552
QY 1365 EAQEDVLRREAKLKEEGTTPPPPSRDLTAYKQALGPLKKAHEGLVATVKEAGRS 1424
Db 553 -----PNMPSQ-----MRL--PGFAGMINSEMEG----- 575
QY 1425 IHEIPREELRHTPELPAPRLPEKESITOGTPLKYDTGASTTCKSKKHVRSILGSPGR-- 1482
Db 576 -----PNVENPASREGLS-GVSNPDDVPKIPDGRNFPFPGQIFSGPGRGE 619
QY 1483 TTPPVHPLDMADARALERACYEESLKSR-----PGTASSSGSGSTARGAPVITPELGKPR 1537
Db 620 RFP-----NPQGLSEMFQQLAEKQLGLPGCMAMEG-----IRPSMEMNR 660
QY 1538 QSPLATYEDHGAPFAGHL-PRGSPVTMREPTPLRQGLSSSSKASQDRKLTSTPRETAKSP 1596
Db 661 MIPGSQR-----HMEPGNNPIFPRIPV-----EGPLSPSRGD----- 692
QY 1597 HSTVPEHHPHPISPYEHLRQV--SGVDLYRSHIPLAFDPTSI PRGIP---LDAAAAYYL 1651
Db 693 ---FPKGIPPMQMGPRELEFGVPSGM---KGDVNLNVNMGNSQMIPOKMEAGAG--- 743
QY 1652 PRHLAPNPTYPHLYPYLIRGYPDTAALENROTIINDYITSOOMHHNTATAMAQRADMUR 1711
Db 744 -----PEMLKLRPG-----SDMLPAQO-----KMVPLPF 769
QY 1712 GLSPRESSLALNVAAGPRGIIIDLSQVP-----HLPVLVPPTGTPATAMDRLAYLPTAPQ 1767
Db 770 GHPQO-----EYGMGPRPFLPMSQPGNSGLNLRPI-GPDQRTNRLSHMPLPLN 823
QY 1768 FSSRHSSSPLSPGGPHTLTKPTTTSSSERDRDRDRDREREKRSILTSTTTTVEHAPTW 1827
Db 824 PSSNPTSLNTAP-----PVQRLGRKPLD-----ISVAGSQVH 856
QY 1828 RPTGTSQSSSSSSSSSSSSSSSPASHAHQ--HSP1--SPRTQDALQORPSVLHNTGM- 1883

Db 857 SPGI-----NPLKSPTHQVQSPMLGSPSGLNLSKSPQTPSQL--AGML 896
Qy 1884 KGIITAVEPSKPTVLRSTSTSSVPRPAATPPATHCPLGGLTDCGVYPTLMPEVLLPK-EA 1942
Db 897 AGPAAASIKSPVLSAAAS-----PVHLKSPSLPAPSPGWTSSPKPLOSPPGIPPNHKA 952
Qy 1943 P-RVAPERPRADTHAFLAKPAPARSGLPSPKSGSEPRPLVPVPSGHATARTP--- 1998
Db 953 PLTMASP-----AMLGNVESGGPPPTASQSPASVNPISGLSPSSTPYTTPPPTLSQNPPLSI 1008
Qy 1999 -----AKNLAP-----ASDPAPPASADPHREKTQSPFISQIELELSLG 2042
Db 1009 MMSMSKAFAMPSSTPLVHDAIKTVASSDDSDPPARS--PNLPSMNNMP-----GMG 1057
Qy 2043 YHGSSYSPGVEPVSPVSSPSLTHDKGLPKHLELDKSHLEGELRPKQPGPVKLGEAAH 2102
Db 1058 INTQNPRISSGNPVPM--PTLS--PMGMTQPL-----SHSN-----QMPSPNAV----- 1099
Qy 2103 LPHLRPLPESQSPSSPLLQTAGVKGHQVVTYLAQHISEVITQDYTHRHFPQOOLAPLPAP 2162
Db 1100 -----PNIPPHGVPM---GPGMLSHNPIM-----CHGQSPMPVPOG 1133
Qy 2163 LYSFGASCPLDLRRPSSDLYLPPDPHAGAPARGSPHSEGG-----KESPEPN 2210
Db 1134 RMGFPQGFPPV---QSPQOVFPF---HNGPSGGQGFPGMGPPGGLGRPSNLPQSS 1187
Qy 2211 KTSVL---GGGEDGTEPVSPGEMTEPGHRSVAVVLLYRDGEQTEPSRMGSKSPGNTSQP 2268
Db 1188 ADAALCKPGGPGG-----PDSFTVLGNSMPSEV-----TDPDLQEVIRPGATGIP 1232
Qy 2269 PAFPSKLTENSAMVSKKQEKINLKNHNRNEPEYNISQGTIFNMPAITGTGLMTYR 2328
Db 1233 EFDLSRIIPSEK---PSQTLQYPRGEVPGRKQPO---GPGPGFSHMQMVG----- 1278
Qy 2329 SQAVQEHASTNMLEAIRKALMGKYDQWEEESPPLSANFNPLNASLSLPAAMPIT----- 2384
Db 1279 -----EQAPRMGL-----ALPGM-----GGPGFVGTDPIDLPATSPMGHNPMPRPAP 1321
Qy 2385 AADGR---SDHTLTPSGGGKAKVSGRPSRKAKSPAPGLASG--DRPPSVSSVHSEGDGNCNR 2441
Db 1322 LQCGMGPHEHMSF---AQSTWFGQPTLMSNPAAVGMIPGDKRGFAGLYTH----- 1371
Qy 2442 RTPLTNRWEDRPSSAGSTFPFYNPLIMRLQAGVNAS-----PP---PPGLPAGSG 2489
Db 1372 -----PGPVGS-----PGMWSMQMVGPPQNIIMIPQMRPRGMAADV 1410

RESULT 94
US-09-963-875-1
; Sequence 1, Application US/09963875
; Patent No. US20020164307A1
; GENERAL INFORMATION:
; APPLICANT: Massachusetts General Hospital
; TITLE OF INVENTION: Stem Cells of the Islets of Langerhans and Their Use in Treating
; TITLE OF INVENTION: Mellitus
; FILE REFERENCE: 17633/1235
; CURRENT APPLICATION NUMBER: US/09/963,875
; CURRENT FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: US60/169082
; PRIOR FILING DATE: 1999-12-06
; PRIOR APPLICATION NUMBER: US 60/215109
; PRIOR FILING DATE: 2000-06-28
; PRIOR APPLICATION NUMBER: US 60/238880
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: US 09/731261
; PRIOR FILING DATE: 2000-12-06
; NUMBER OF SEQ ID NOS: 58
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 1618
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-963-875-1

Query Match 2.7%; Score 358; DB 9; Length 1618;
Best Local Similarity 21.1%; Pred. No. 4.9e-08;
Matches 323; Conservative 196; Mismatches 511; Indels 502; Gaps 77;
Qy 97 KSEMERIESKRPRL--ELLIP--DPLLRPSPL--LATGQPA--GSEDLTKDRSLTGKLEP 147
Db 329 KLELQPPRTPEGRRLGSLLEVLSPFSLPAPLATETVPFAFLKNQGFLOQARTFLASTP 388
Qy 148 VSPSPPHHTPELELVPPLRLSKEELIQNMDRVDREITMVEQOISKL-----KKQOQOLE 201
Db 389 I-PPTQAPSP-----AVDAETRAQADAPLSLLQTQGRKQAPFLR 428
Qy 202 EEA--AKP-----PEPEKP-----VSP-----PPIESKH----- 223
Db 429 AEARVAIPASVLPGPBEPGQROEASTQSPEDHASLAPLSPDHSLKADGSGGSRV 488
Qy 224 -----RSLVLIIDE--NRKAEAAH-----RILEGL 248
Db 489 FSIORGEGQIWLVEKETAIEGVVSSLOQEIWEEDENRKEIQDSQVPLEKETLUSL 548
Qy 249 GPOVE---LPLYNQPSDTROYHENIKINOAMRKLLILYFKRRNHARKQWKQFCQYDQL 305
Db 549 GEIQSLKLENOQSHETLE-RENOECPRSEEDL-----ET 584
Qy 306 MEALEKKVERI-----ENRRRAKESKVRYEYEQFPEIRKQRELQERMOSRVQORG 358
Db 585 LKSLXENKRAIKGCGSETSRKRGCKQLKPTKEDTQTLQ-SLOKENQELMLKSLGNLE 643
Qy 359 SGLSMSAARSEHEVSEIIDLSEQENLEKQMRQLAVIPMLYDADQQRIFKFINMGLMAD 418
Db 644 TFL-PPGTENQELVSSLOENLESITALEKENQELRSPSEV---GDEEALPLTKEN--QE 697
Qy 419 PMKVYKDRQVMNMWSEQEKETFR--EKFMQHPKNFGLIASFLERKTVAECLVLYLTCKN 476
Db 698 PLASLED-----ENKEAFRSLKENQEP-----LKTLEEDQSIVRPLET 737
Qy 477 ENYKSL-----VRSYRRRGKQQQQQQQQQQQQQQQQPPMRSSQEEKDEKEKEAE 530
Db 738 ENHLSRLSEEQOETLRTLEKETQRRRRSLGEOQMTLRP-----PEKVDLEPLKSLD 791
Qy 531 KEEEKPEVENDKEDLLKEKTDGDDTSGEDNDEKAVASKRKTANSQGRKRGRIHSMANEA 590
Db 792 QETARP--LENENOEFLLKKEES-----VEAVKSLTETILES-----LKSAGQE 834
Qy 591 NSEEAITPQOSAEALSMELNESSRWTEEM-----ETAKKG-----LLEH 630
Db 835 NLETLKSPETOAPL-----WPEEINKSGNNESSRKGNSTTTGVCSEPRDIQTP 884
Qy 631 GRNWSAIFARMVSGKTVSQ-----KNFYFNKQNLDELILQOHLKMKERNARRKK 683
Db 885 GRGESGIIETSGSMWEPGEFISRGVDKESQRLNEEENLKGEXQESL-----RSLBEEG 939
Qy 684 KKAPAAASEAAFPVVEDEME-----ASGVSGNEEEMVEEAALHASGNE--VPRGE 735
Db 940 QELPQSDAVQWEDTVEKQOQLAQESPFGMVAENKDEALNREQDGTGKEVVRQGE 999
Qy 736 CSGPATVNNSSDTEISIPSP---HTEAAKDTGQNGKPPATL--GADGPPPGPPPTPRRTS 790
Db 1000 LNA-----TEEVWFPGEHPENPEKQGLVEGASVKGAGELQ----- 1039
Qy 791 RAPIETTPASEATGAPTPPPAPPSPSPAPPPVWPKKEEETAAAPPVEEGEQKPPAAEE 850
Db 1040 -----DPEGQSQQVGTPLQLOAPGLPEAIFLVEDDVAPGQDQASPEVMLGSE---PAMGE 1092
Qy 951 LAV-----DTCK-----AEPVSKSECTE-----EAEEGPAKGDAAEAAT 886
Db 1093 SAAGAEPGLGQVGLGDPGHLTREEVMEPPEEESLEAKRVQGLEGR--KDLSEA--- 1147
Qy 887 AEGALKAEKKE--GSGSRATTAKSSGAPQDSDSATCSADEVDEAE-----GGDKNRLSP 940
Db 1148 --GGLGTFFSELPGKSRDPWEPPREGRESEAEAPRGAEEAFPAETLUGHTGSD-----AP 1200

Db 760 GE-----DGEPTATPGISAPDKTGE-----GSKTESD-----GE 790
Qy 669 HKLMEKE-----NRARKKKKAPAAAEAEAPPVVDEEMEAAGVGNBEEVM 718
Db 791 EKLTVKDGKEAOGSSGSSATSSGKKSSEATSSGSSSA-----KSGTGEASGSG- 840
Qy 719 EEAALHASGNEVPRGCGSPATVNNSSDTSIPSPHTEAAKDTG-----763
Db 841 -----ASSSGSGVSGESGSSVSTESGFGTSSGSGVSEATGTVGDSGSGKPSKSTE 896
Qy 764 -----QNGKPKPATLGADGPPGPPPTPPRTSRAPIE-----795
Db 897 EKLPTKNGEKSPIS-GSD--TTCKESSEETTRKPIEGSDSLTEGSGGEWFETGSKGH 953
Qy 796 -----PTPASATGATPTPPAPPSPAP-----PPV 821
Db 954 PESGSKSVTSVGKPT--QSGAEGSGGPKVPKPGAPAEITTDGEESSTSTGDKSGKPA 1012
Qy 822 -----VVK-----BEKEETAAA-----PPVEEGEEOQPPAAE-- 849
Db 1013 DKSDKNVPTGDKNPDIITDGEDSTSETSGGQPKGKSGKQPPGDKGSEVKKPTSEVD 1072
Qy 850 -----ELAVDTKABEPPVKSECTEAEAG-----PAKGDABAEATAEGAL--KAKEG 898
Db 1073 GPGNLGSKTKSNVLPK--TDLPEGSGILTTSSGKNSTFBHGTKLERLPKPTEDKSS 1130
Qy 899 GS--GPATTAKSGAPOSDS-----SATCSADEVD--EAEGGDKNRLLS 939
Db 1131 ETPQLGLEISAGKKPEPEDGTSKEVGLLEIWESTTPGSTTLDSDVGLLEISGSDLTK-AT 1189
Qy 940 PRPSLL--TPTGDPRANASPKPLDLKQLKQRAAAIPPIQVTKVHPRED-----988
Db 1190 KKHVEIEGSGTGDEEITATR-----DVSKSTKPRVEDVGDGNGE 1231
Qy 989 --AAPTAPAPPPPPONLOPE--SDAPQCGSPRGKSRPAPPADKEAFAAQAOLP-G 1044
Db 1232 TSGVDGKPTTAPTPSSASBSTSRIPPTSEASPEGSGEAGVPESPDGSGESSTAPDG 1291
Qy 1045 DPCWTSGLFPVPPREVIKASHADPPSAFSAFVAPGHPGLGLHDTARVLPPT--I 1102
Db 1292 VSP--TSSATAPEVPTTASSTDDAVEEG-----IPSTSKPTAEFLETTAPSTEV 1340
Qy 1103 SNP-----PPLISSAKHPSVLERQICAISSQGMVQ--LHVPYSHAKAPVGPVT 1149
Db 1341 TSEGSSTESTLPTTEGSGE-----STTSSAPTVEPATVLPQNRNEXPEPTKDT 1391
Qy 1150 MGLPLMDPKLAPFGVKQEQLSPRQAG-----PPESLGV-- 1186
Db 1392 FALPTTTTGAPOANDSSVENTKCTSDCEGLDALCERRTGVCRCPEGPEGAPPKSCVDV 1451
Qy 1187 -----PTA-----QEASVLRCTALG-----1201
Db 1452 DECATGDHNCHEBARCONVYGVYACFPTGFRKADGSCODIDECTEHNSTCCGANAKV 1511
Qy 1202 SVPG-----GSITKG--IPSTRVPSDAITYRGSITHGTAPADV-----1238
Db 1512 NKPGTYSCECENGFLGQYQCVPTTKPCDST--QSSKSHCESNMSCEVDVDSGVEC 1568
Qy 1239 -----YKGT-----ITRIIGEDSPRLDRGRDLSLPKHVYEGKGHVLYSEG-GMS 1285
Db 1569 KECWGGYKSGKVCEDINECVAEKAPCSLANCNVM--NGTFSCSKQG-----YRGDGM 1622
Qy 1286 VTQCKEDGRSSGPPHE-----TAAPKRTYDMMEGRVRA 1321
Db 1623 CTDINECDERHPCHPAECTNLGSKFCECHSGFEGDGIKKCTNPLERSCEDVEKFCGRV 1682
Qy 1322 --ISSASI-----EGLMGRAPPRHPSPHLKEQHIGRSI-----TOGI 1359
Db 1683 DHVSLSVRIYNGSLSVCECEGPFREKESNSCVDIDEEESNNCDPASAVCNVTEG- 1741
Qy 1360 PRSY-VEAQBDYLRRKAKLKRGTGTPPPPPPPSRDLTBAKYTQA-----LGP--L 1405

Db 1742 --SYRCECABGY-----EGEG-----GVCTDIDECRGMAGCDSMANCIHRMGSCG 1786
Qy 1406 KLPKAEGLVAT--VKEAGRSIHEIPREBLRHTPELAPRLPLKEGSIQTGTPKLYDTG 1462
Db 1787 KCMAGYTGDCATCICKIEERPCKSDKTACTDEWSLCELEKKQCTVDEEVQ-----1837
Qy 1463 ASTTGKKHVDRLISQPGRTFPVPHPLDVMAARALERAC-----YEESLKSRPGT 1514
Db 1838 -----CGACLFGHPHNGTCSLOQISGLCAQKNCIDNKAECIDIHPS 1880
Qy 1515 --ASSSGSGSTARG-----APVIVP 1531
Db 1881 HFCSCPDGFIGDGMICDDVDCECNAGMCDDEKNTGFCNVCLEGGFKKDEKCVUD 1940
Qy 1532 ELCKPQRSPLTYEDHGAPFAGHLPGRSPVPMREFTPLRQEGSLSSSKASQDRKLTSTPRE 1591
Db 1941 EKKQPNREKLEIDEENS-----SSNSGOEKPTTK--GIVSSTSATESSETAEP-- 1988
Qy 1592 IAKSPHSTVPEHHHPHPISPYEHLLRGVGVDLVRSHIPLAFDPTS--IPRGIPLDAAAAY 1649
Db 1989 -----HVTTSISSTTK-----DMTSSKSPENVTMSSS-- 2018
Qy 1650 YLPRHLPNPTYPHLYPPVILRGYDPDTAALENQTIINDYITSOQMHNTA-----1700
Db 2019 -----PEVSTSSKSTTASETTVSTPSESSEAPLTSPP 2054
Qy 1701 --TAMQADMLRGLSPRE--SSLALNVAAGPRGIIDLQVPHLPVLVPTPTCPATAM 1755
Db 2055 ATTVEVITESSVKSTTPKESSESEITVKLSKSPEVTESS-----VKSSSTPTPTS 2106
Qy 1756 DRLAYLPTAPQPPSSR--HSSSPLSPGGPHL-----TKPTTTSSERERDRDRDRDR 1808
Db 2107 QSVT--STVPETSKTVLSSEAPVTSPTVEHTSETKPSLSASS--TTGDTNSTPS 2161
Qy 1809 EREKSILTST--TTVEHAP-----IWRPGTE-----QSS--CSSGSGSGGGG 1846
Db 2162 TSSLASVKTSAPEGTSASVAPVKLSLSLSDVSPQSTKTTPDATESSTVQASSETSGSVK 2221
Qy 1847 SSSRPASH-----SHAHQHSPI--SPR-----TQDALQORPSVLHNTGKGIITA 1889
Db 2222 STSEPHSHVTKLITSNSPSSSVPTSPKSTPTVPSTEQPTSTTPSGSLTPMNSSEV 2281
Qy 1890 VEPSKPTVLKSTSTSPVPAATFP-----PATHCPLG-----GTLDGVPVTL 1932
Db 2282 LTTSEPHVL--SSLSLSDVSPQSTTPNNLSSESTVETPKTSESVLSNSEEPTTEA--PTT 2338
Qy 1933 MEVLLP-----KEAPRVARPERPRADTCHAFKAPPARSGLEPAS-----SPS 1976
Db 2339 LSPDILSTTTNNLSQSTVSTEDRSEISSENS--EKPTSAPELVTSSVTHVASSSPDVPT.2396
Qy 1977 KGSEPRPL-----VPPVSGHATIAARTPAKNLAPHASDPDPAPPASADPHREKTQSK 2029
Db 2397 ESSEPDLLTGSSTENIPEASSKQTISSTP-----TPD-----TTTASBEPTKSTMS 2443
Qy 2030 PFSIQBLELRSLGYHGSYSPGVEPVSPVSSP-----SLTHDKGLPKHLBELDKSHLEGE 2085
Db 2444 P-----DLSTTSNVLSSESTTPES--SKSPVSSSTEGISVVTSTEFKSVPESTISSVLEED 2498
Qy 2086 LRPKQPGVKLGEEAAHLPHLRPLPESQPSSSLQTA--PGVKGHQRVVTLAQI---S 2140
Db 2499 LTKTTPSPI-----LEETTTASETSEPLTSDLTSVSVRIHE--LTTSSENVPKES 2546
Qy 2141 EVITQDYTRHHPOOLGAPLAPLYSPGASCPVLDLRRPPSLDLYLPPPDHG-APARGSPH 2199
Db 2547 ESTTTSESSEKPKQEFAGILTSVVVPTSSVLSITASEIAEIAISNTFPKQGRPIITTSK 2606
Qy 2200 -----SEGGKRSBPENKTSVLGGGEDGIEPVSPPEGMTEPGHRSRVAVPLYVRGEQT 2252
Db 2607 SLVKSTTSPSTVTSSEPSSESTKRTTSTVSTTTPTEETTT--SESLI--LTAAPSKPT 2661
Qy 2253 EPSRMGSKSPGNTSQPPAPFSLKTESNAMVKKQBIKINKLNTHNRNEPEYNI-----S 2307
Db 2662 ESTTESSEAP-----TTPAKTSETKPSNVSTSRKSTE-NVETSTSQSGSLESSTMSSTSS 2716

Db 769 GPP-----GPPGAGKEGKGPRGE-----TGPAGRCEVGPDPGPPAGEKGS 812

Qy 1714 SPRESSIALNYAAGPRGIIIDLSQVPHLPVLVPPT--PGTPATAMDRLAYLPTAPQPFSSR 1771

Db 813 PGADGAGAGTGTGQGIAGQGVVGLPGQGERGFPGLFPGSGE-----PGKQGPFGAS 867

Qy 1772 HSSSPLSPGQPTHLTPTTTSSSERERDRDRDREREKESILTSTTVEHAPIWRPGT 1831

Db 868 GERGPQPMGPPGLAGPPGESGRE-----GAPGA 896

Qy 1832 EQSSSGSSSGGGG-----CSSSRPASHAHQHSPISPRTQDALQORPSPVLHNTGMKGI 1886

Db 897 EGSFGRDGSFCAGDRGETGAPGPGGAXGAPGVGP-----ACKSGD 941

Qy 1887 ITAVERSKPTVLRSTSTSSVPRPAATPPPATHCPLGCTLDGVPTLMEPVLLPKEAPRVA 1946

Db 942 RGETGPAGP-----AGPVGPAGARP-----A 963

Qy 1947 RPERPRADTGH-----AFLAKPPARSGLEPASSPSKSGSEPRPLVPVSGH 1991

Db 964 GPQGRDKGETGEGQDRGIKGRHFGSLQGPFGPGSGEGQPSGASGP-----1013

Qy 1992 ATTARTPAKNLAPHHASPDPPAPASADPHREKTQSKPESIQELELRSGLYHGSSYSPE 2051

Db 1014 -----AGPRGPPGSAGAPGKDLNGLPGPI-----GPPGPRGTG 1048

Qy 2052 GVEPVSVSPSLTHDKGLPKHLELDKSHLEGELRPQGPVKLGGEAAHPLHLRPLPE 2111

Db 1049 DAGPVGPPGPPG-----PPGPGPPSAGPDFSFLP-----1078

Qy 2112 SQPSSSPLLQTAPGVKHQ-----RVVTLAQHISEVITODYTR 2149

Db 1079 -QP-----POEKAHKGGRYVRADDANVVRDRLVDVTLKLSQIENIRSPGXK 1128

Qy 2150 HHFQQLSAPLPAPLYSPFGASCPLDLRRPPDLPLPPDPHGAPARGSPHSEGGKSP 2209

Db 1129 KNPAR-----TC--RDLKMCCHSDW-----KSGEYWIDP 1154

Qy 2210 NKTSVLGGGEGDIEPVSPPEGMTEPGHSRSVYPLLYRDGEQTEPSRMG-----SKSPGN 2264

Db 1155 NQ-----GCNLDAIKVFCNME-----TGCTCVP-----TOPSVAQKNWYISKPKD 1196

Qy 2265 TSQPPAFFSKLTES-----NSAMVKSQKQEKINKKLNTHRNEPEYNIS 2307

Db 1197 KDRHVWFGESEMTDGFQFEYGGQSDPADVAIQLTFLRLMSTEASQNTIYHCKNSVAYMDQ 1256

Qy 2308 QPG 2310

Db 1257 QTG 1259

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